EAST BLOOMSBURG BRIDGE COLUMBIA COUNTY 1894 - 1986



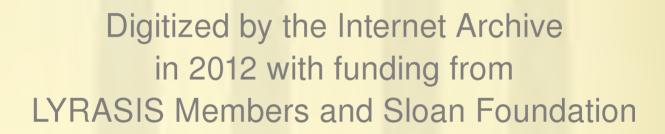
HISTORIC AMERICAN ENGINEERING RECORD DOCUMENTATION

built by:

Superstructure - King Bridge Company, Cleveland, Ohio Substructure - Joseph Hendler Plans and Specifications - J. C. Brown Supervising Engineer - J. C. Brown

prepared for
Pennsylvania Department of Transportation

prepared by
Modjeski and Masters
Consulting Engineers
November 1985



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EAST BLOOMSBURG BRIDGE L. R. 283, SECTION 014 TOWN OF BLOOMSBURG COLUMBIA COUNTY, PA

HISTORIC AMERICAN BUILDING SURVEY/ HISTORIC AMERICAN ENGINEERING RECORD MONOGRAPH

Prepared for
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

Prepared by

MODJESKI AND MASTERS Consulting Engineers Harrisburg, PA



EAST BLOOMSBURG BRIDGE

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HISTORIC AMERICAN ENGINEERING RECORD

EAST BLOOMSBURG BRIDGE HAER NO. PA-100 (PAGE 1)

LOCATION:

The East Bloomsburg Bridge carries PA Traffic Route 487 (L. R. 283), known as Ferry Street, over the North Branch of the Susquehanna River at Ferry Road in the Town of Bloomsburg, Columbia County, Pennsylvania. The East Bloomsburg Bridge is located on the U.S.G.S. Catawissa Quadrangle, Scale 1:24,000, Map Zone 18, at the following Universal Transverse Mercator Coordinates: E 45 38 750; N 3 78 880.

DATE OF CONSTRUCTION:

1893 to 1894

ENGINEER/BUILDER/FABRICATOR:

King Bridge Company - Superstructure Joseph Hendler - Substructure

PRESENT OWNER:

The East Bloomsburg Bridge is presently owned by the Pennsylvania Department of Transportation, Transportation and Safety Building, Harrisburg, Pennsylvania 17120.

PRESENT USE:

The East Bloomsburg Bridge carries vehicular traffic on Traffic Route 487 over the North Branch of the Susquehanna River from Ferry Road in the Town of Bloomsburg to East Bloomsburg in Catawissa Township. It provides direct access to U. S. Route 11, a major north-south highway serving east-central Pennsylvania. The current average daily traffic (ADT) on the bridge is 6,000. Demolition of the bridge is scheduled to occur in 1987.

STATEMENT OF SIGNIFICANCE:

The existing East Bloomsburg Bridge was completed in 1894 by the King Bridge Company of Cleveland, Ohio. It consists of six (6) equal pinconnected through-truss spans of 190 foot length with two feet between end bearings at the piers for a total length of 1150 feet. The truss spans are of the "Pennsylvania" (Petit) type with ten (10) equal panels of 19 feet each. The truss members are made of steel and wrought iron and the pins were made of steel. The significance of the structure is twofold; one, that it was constructed prior of 1900; and two, that it was built by the King Bridge Company, one of the most important truss bridge manufacturing companies in the United States in the 19th Century. The bridge also exhibits a high degree of its original integrity.



PROJECT INFORMATION STATEMENT:

The Federal Highway Administration (FHWA) and the Pennsylvania Department of Transportation (PennDOT) propose to replace the existing Traffic Route 487 (L. R. 283) Bridge (locally known as the East Bloomsburg Bridge) over the North Branch of the Susquehanna River at the Town of Bloomsburg, Columbia County, Pennsylvania, with a new structure. The existing through-truss bridge, determined eligible for the National Register of Historic Places, would be demolpart of the proposed bridge replacement project accordance with the Memorandum of Agreement on the East Bloomsburg Bridge dated December 3, 1984, a copy of which is included in this The Pennsylvania Department of Transportation, in cooperation with the Federal Highway Administration, is the responsible agency for this bridge replacement project. The project is scheduled for the First Four Years of the Pennsylvania Department of Transportation Twelve Year Program and is in Act 235 (Billion Dollar Bridge Program). Federal Authority to undertake the project is found in Title 23, Chapter 1, of the U. S. Code of Federal Regulations.

The Memorandum of Agreement also stipulates that FHWA, PennDOT, the Pennsylvania State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation shall implement a documentation of the present bridge so that there will be a permanent record of its existence. The Historic American Engineering Record (HAER), Department of the Interior, Washington, D.C., shall be the accepting agency. This Historic Documentation has been prepared by Modjeski and Masters, Consulting Engineers, Harrisburg, Pennsylvania.



HISTORY OF CROSSING:

On August 23, 1892, a petition was presented to the court by citizens asking for a free County bridge across the Susquehanna River at Bloomsburg, and on the same day the Court appointed C. H. Moore, M. C. Vance and Simon Hons, viewers, to report on the same. September 21st a petition was presented by citizens of Catawissa to stay the proceedings. An answer was filed and depositions taken, and Judge Savidge of Sunbury was called in by Judge Ikeler to hear and decide the case. The latter petition was dismissed by Judge Savidge, and to this action exceptions were filed, and also a petition for reviewers, the first viewers having reported in favor of a bridge. After some skirmishing between the parties, C. W. Eves, W. S. Fisher and G. B. Hendershott were appointed, and on May 1, 1893, they reported in favor of a bridge; this report was laid before the Grand Jury on May 3rd and approved by them with the recommendation that the bridge be erected at the expense of the County.

The nearby Borough of Catawissa had a covered wooden toll bridge, which was built in 1833, destroyed in 1875, rebuilt again in 1875, and made toll-free in 1893. Due to the age of this structure and the jeopardy to destruction from ice jams and floods, the citizens of Catawissa believed that available County funds should be first used for construction of a County bridge at the site of the existing bridge at Catawissa. The petition to stay the proceedings of the Bloomsburg Bridge was the result.

On May 4th more exceptions were filed by opponents of the bridge, and the matter dragged along from time-to-time until November 9th, when the Court made the following order: "And now, November 9, 1893, all exceptions having been withdrawn in open court and all adverse proceedings abandoned, the report of the reviewers and Grand Jury is approved, and it is adjudged that the said bridge is necessary as a county bridge, and that the same is too expensive for the township of Catawissa and the Town of Bloomsburg to bear, and upon the concurrent approval of the same by the county commissioners the said bridge is ordered to be entered of record as a county bridge."

The Commissioners concurred, and on November 24th they had a letting, and after due consideration awarded the contract for the superstructure to the King Bridge Company, and for the masonry and other work to Joseph Hendler. J. C. Brown was employed by the Commissioners to prepare the plans and specifications, and to make an estimate of cost, and also to be the Supervising Engineer of the work. The estimated cost was \$69,256. Jesse Rittenhouse,

B. F. Edgar and C. L. Sands were the County Commissioners at the time. The bridge is iron and steel, and is 1,150 feet long, with six spans. The cost of the superstructure was \$35,500; of the substructure \$35,415.46, and the riprapping and filling \$2,384.21, making the total cost \$73,299.67.



The site proposed for a free County bridge across the Susquehanna River at Bloomsburg was at the foot of Bloom Ferry Road. This road was the access to the ferry across the river in Bloomsburg. The ferry crossing was the route to the area of the State south of the Susquehanna River, which also provided a connection to the toll road known as Centre Turnpike Road. Existing Pennsylvania Route 61 from Sunbury to Reading is the approximate location of the Centre Turnpike Road at that time.

It was then concluded that the bridge crossing of the river would logically be at this same site. This would give the Town of Bloomsburg a more direct connection to the coal regions to the south, and henceforth to Pottsville and Reading via the Centre Turnpike Road. This was at the exact time of the decline in the iron industry and canal systems and it enhanced the Bloomsburg area turning to the silk and textile industry, in addition to school furniture for industrial development.

SELECTION OF CONTRACTOR:

A copy of the original contract between the Columbia County Commissioners and the King Bridge Company to build the East Bloomsburg Bridge is attached. The contract stipulated that the King Bridge Company was to build, paint (two coats), and have ready by October 1, 1894, the superstructure for a Wrought Iron Bridge over the Susquehanna River at a point where the Bloom Ferry Road crossed said stream in the County of Columbia and State of Pennsylvania.

The above standard documents from the King Bridge Company also stipulated only the following details of the bridge:

Extreme Length of Bridge
Space between the face of the
Abutments or Waterway
Roadway
Sidewalks
None
Number of Spans
Six (6) equal spans

The contract cost was agreed to be \$35,500.

The King Iron Bridge and Manufacturing Company, founded by Zenas King, was established on January 26, 1871. By 1884 the Company was one of the leading bridge builders in the United States. Prior to the formation of the King Iron Bridge and Manufacturing Company, Zenas King had acquired a great deal of experience in manufacturing and engineering. King began his career in 1848 when he established a mercantile business in Milan, Ohio, with C. H. Buck. In 1856,



Mr. King became a traveling agent for Scott and Hedges Company and in 1858, Traveling Agent for the Moseley Bridge Company which specialized in a unique triangular tubular Wrought Iron arch bridge. During this work with Moseley, King was impressed by the fallibility of wooden bridges and the potential offered by the metal arch. Thus, it is no surprise that his first of a number of bridge designs was the "King Patent Tubular Arch" patented in 1861. King substituted a square-shaped tube for the triangular Moseley design. By this time King had relocated to Cleveland and established a boiler and bridge works, although the boiler manufacturing was soon dropped as the tubular arch grew in popularity.

King first met considerable resistance to his design. It had much less iron than earlier metal trusses, and its comparative inexpensive cost resulted in skepticism. Furthermore, the visual slenderness of the truss components seemed too drastic a change from the massive wooden members. King, however, was able to overcome these obstacles to incorporate in 1871 what literally became one of the Nation's largest and most successful iron bridge companies. The firm manufactured an assortment of trusses, including a number of other King-patented trusses, but it was the tubular arch bridge that made the Company's reputation and fortune.

The King Bridge Company sold bridges throughout the Nation through agents. The Contracting Agent for the East Bloomsburg Bridge was V. Morris. The Contracting Agents each had their own King Bridge Company brochure for prospective clients. Typically, each brochure contained the following:

"GENERAL SPECIFICATIONS

These structures are proportioned to sustain the passage of the heaviest travel. The iron-work will be so proportioned that the load, in addition to the weights of the structures themselves, shall not strain the iron over 12,000 pounds per square inch tensile, or 7,500 pounds per square inch shearing strain, and reducing the strain in compression in proportion to the ratio of length to diameter, by Gordon's formula.

The iron used under tensile strain shall be of tough and ductile quality, and be capable of sustaining 60,000 pounds per square inch of section. Each superstructure to consist of plank and timber flooring, supported by two or more trusses of wrought iron. The trusses to be composed of Wrought Iron Arches, Chords, Uprights and Diagonals.



Persons requiring Bridges, please give us the following information: Number of Spans required; length of each Span between face of piers at top; width of Roadway in the clear; width of Sidewalks, if any; if on a skew, give the angle.

With the above mentioned data furrished, we will furnish estimates and plans."

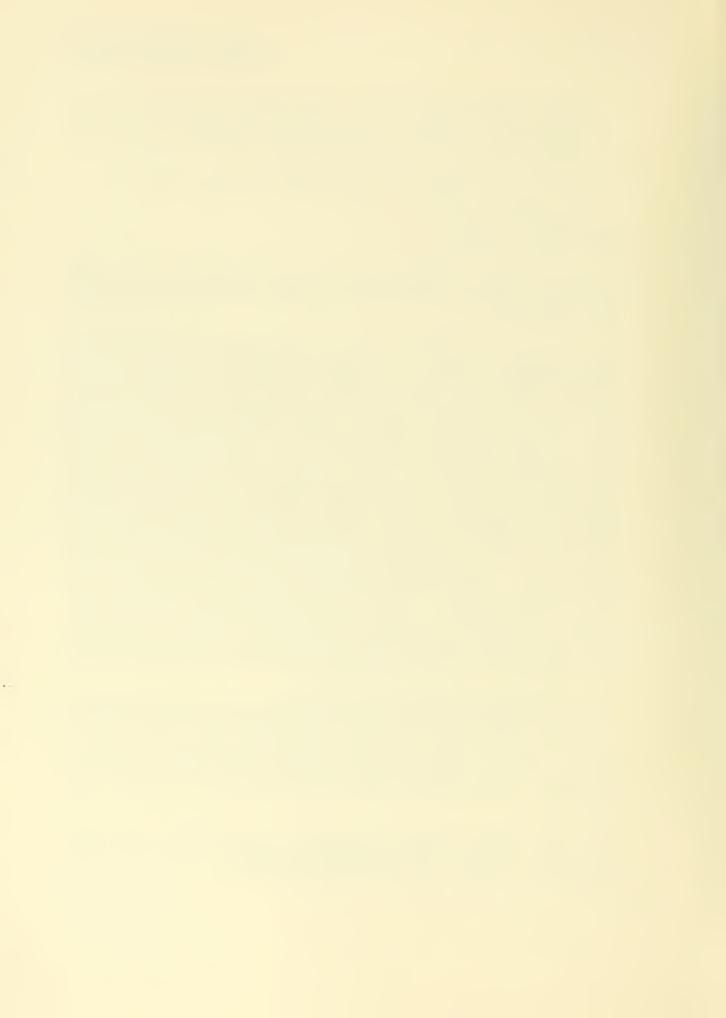
DESCRIPTION OF BRIDGE:

The King Bridge Company of Cleveland, Ohio constructed the East Bloomsburg Bridge as a Pennsylvania (Petit) pin-connected, throughtruss bridge to span the Susquehanna River with six (6) spans of 190 feet length each.

The original preliminary drawing of the bridge for one span was dated November 29, 1893. It indicated a ten-panel through-truss of 18.9 foot panels for a total length of 189 feet. The actual detail drawings dated January 17, 18 and 19, 1894, indicate panel lengths of 19 feet, for a total truss length, bearing-to-bearing, of 190 The truss has a polygonal top chord with subdivided panels and is called a "Pennsylvania" truss. The "Pennsylvania" truss is also sometimes termed a "Petit" truss. The evolution of the "Pennsylvania (Petit)" type truss began with a "Pratt" truss. In order to use this truss for longer spans, C. H. Parker introduced the idea of making the top chord of the "Pratt" truss into a polygonal shape and this is referred to as a "Parker" truss. 1871 the Pennsylvania Railroad Company developed a "Baltimore" truss by deepening and subdividing the panels of the "Pratt" truss for longer spans. They subsequently modified the "Parker" truss in the same manner by deepening and subdividing the panels and called it a "Pennsylvania" truss. Both the "Baltimore" and "Pennsylvania" trusses are sometimes referred to as "Petit" trusses and therefore the implication seems to be that a person by the name of Petit in the Pennsylvania Railroad Company organization was responsible for the conception of both of the above.

The East Bloomsburg Bridge consists of six (6) 190 foot spans with two feet between end bearings at each pier, for a total length of 1,150 feet. Each span consists of ten 19-foot panels which vary in height from 22 feet to 34 feet. The trusses are spaced at 19'-2" which provides a roadway width of 18 feet. The bridge contains no sidewalks. The abutments and five (5) piers were faced with stone masonry.

The trusses were designed for a "Static Load of 732 lbs. per linear foot" and a "Rolling Load of 1440 lbs. per linear foot". The road-way plank, stringers and floorbeams were designed for "100 lbs. per square foot" and the "Factor of Safety was 4".



The material of the structural shapes, floorbeams and pins is steel and the plates and eyebars are of Wrought Iron. Approximately in 1893, steel became the predominant material for shapes such as angles, channels and I-beams, and for this bridge, the steel shapes came from Carnegie Steel Company. The roadway floor consisted of 2-1/2 inch oak flooring supported by stringers consisting of two lines of 7 inch channels by 8.5 lbs. and five lines of 7 inch channels by 15.5 lbs. The stringers were supported by the steel floorbeams which are 15 inch I-beams by 41 lbs.

The longer span trusses built by the King Bridge Company of the "Pennsylvania" type truss are almost extinct and this may be the only remaining one in Pennsylvania. They are noted by the ornate Wrought Iron finials which decorate the end posts and by the lattice work which runs along the portal struts and vertical and diagonal posts.

The contract for the substructure of the bridge was given to Joseph Hendler of Wilkes-Barre, Pennsylvania. The contract for the substructure was an estimate, since the work was to be paid for at unit costs for excavation, both above and below water, and for stonework. It was indicated (Bloomsburg Daily, November 29, 1893) that Mr. Hendler has had considerable experience for this type of work. They were informed that he had constructed the masonry for "no less than six bridges across the river and that he did the work for the new Railroad bridge for the Lehigh Valley above Wilkes-Barre".

The plans for the bridge required that the stonework to be of substantial character, each stone to be of great size and the piers and abutments when completed to be similar to those seen in the construction of railroad bridges. The actual plans only showed the outline dimensions of the piers and abutments.

An inspection report filed by John A. Wilson, Civil Engineer, for the Columbia County Commissioners and reported in the Bloomsburg Daily of April 11, 1894, indicated substantial problems with the construction and design of the substructure. The following is a partial quote from Mr. Wilson's report:

"The filed plans do not indicate the character of the proposed foundations, but the detailed masonry plans and Mr. Brown's verbal explanation indicate that Pier No. 1 (from the South side of the river) will be located on the rock, the foundation being put in through the medium of a coffer dam. For the other four piers



my understanding is that it is proposed to use timber platforms on the present bed of the river, the platform being floated into place, wooden sides being built up to exclude the water, thus forming a caisson, and the caisson being sunk with the weight of the masonry built inside of it. On inquiry I am informed that the bottom of the river is formed of gravel and coal dirt, but that no examinations have been made to ascertain what is below the surface of the gravel.

It seems to me that a great risk is being taken, in founding the piers of an expensive and important bridge in the river bottom, without any knowledge of what is below. Assuming, however, that the river bottom is hard gravel, it will be necessary to protect the timber bottom with riprap (which is not provided for in plans, specifications or contracts) and obstructions will thus be formed in the river, the result of which will be to cause the channels in the river to deepen by washing. This, it is well known, will occur in the hardest gravel, and in a few years the bottom of the piers might be above the rest of the river bed. with more or less tendency to be injured with heavy freshets or ice floods. My opinion is that the foundations of the piers should be placed not less than 3 to 4 feet below the present river bottom except where they rest on rock. It might be found by examination, that rock could be reached at a reasonable depth below the river bottom, in which case it would be advisable to use coffer dams and sink to it. The same question comes up relative to the foundations of the north abutment. When I was at the site the excavation had been made a few feet in depth. The material was hard gravel but with water flowing freely as if from springs, I was informed that after I left the place on March 30, the foundation timbers were hurried in for fear that quicksand might be struck. Mr. Brown, however, said to me that he had tested the place with bars and found several feet of gravel below the proposed foundation level.

If I were professionally responsible for the work, I would want to make more satisfactory examinations before constructing an abutment for a large river bridge of that kind, and if there were any quicksand there, I should want to know it before putting masonry on it. The south side abutment I understand is on rock which of course makes a good foundation. I have stated that the dimensions of the piers appear to be sufficient, but I regret that I cannot say the same of the abutments."



As noted on the pier plans, the dates are April 12, 1894, and therefore, they were probably revised and founded on rock at a lower elevation. There is no evidence that the design of the abutments and wingwalls was changed from the original plan dimensions, although the drawing plan dates are May 1, 1894. The present condition of the abutments and wingwalls can be observed and they can be described as excellent, with no evidence whatsoever of any movement or deterioration.

DECLINE AND RECENT HISTORY:

Originally opened to traffic in 1894, the existing East Bloomsburg Bridge is a six-span "Pennsylvania" through-truss structure, with spans of 190 feet each. The roadway consists of two 8'-3" lanes, with no shoulder or sidewalks. Vertical clearance varies from 16'-0" at the curb line to 16'-11" over the center 10 foot width of the bridge.

The East Bloomsburg Bridge was in constant use until 1914, at which time, the Columbia County Commissioners let a contract to the Farris Bridge Company to redeck the bridge. This construction consisted of the placement of a 4 inch laminated wood floor, overlayed with a bituminous surface and resulted in an overall roadway width of 16'-8" between curbs. In 1924, the County let a contract to lay new 3 inch White oak plank diagonally to the existing floor.

By 1954, the bridge had begun to deteriorate structurally and, therefore, the Pennsylvania Department of Highways let a contract to the High Welding Company of Lancaster, Pennsylvania to redeck the bridge with an open steel grid, install steel guard rails and reinforce various structural members.

The bridge, previously posted at 13 tons and limited to one truck, has recently been posted with a 10-ton weight limit, due to severe structural deterioration discovered in a PennDOT bridge inspection.

According to the bridge inspection report, completed by PennDOT in March 1984, the structure had some serious deficiencies which required immediate emergency repairs. These deficiencies included severe rusting and critical section loss on most primary and secondary truss members and severe spot rust on stringers, floorbeams, portals and upper strut bracing, and bridge deck. Span 1 also had sectional loss on the floorbeams and stringers. Following the emergency repairs, the posting was raised to 10 tons; however, still with a restriction to one truck on the bridge at any given time.

A major traffic route for approximately 6,000 daily users, the existing narrow and deteriorating East Bloomsburg Bridge creates severe social and economic hardships for the local communities and businesses. The structure has recently been posted with a 10-ton weight limit. Trucks over 10 tons must detour approximately 20 miles to I-80 at Mifflinville, or detour approximately 40 miles to



the Danville Bridge on Route 54. The existing facility is not adequate for present traffic volumes and loads. Replacement of the East Bloomsburg Bridge is included in the Federal Critical Bridge Program, the PennDOT 12-year Highway Program, and is also included in the Billion Dollar Bridge Program created by Act 235.

The age of the structure, combined with its lightweight truss construction, cause the bridge to be structurally inadequate for current transportation demands. This has also been established by detailed structural analysis. The restrictive horizontal clearance, as well as the bridge posting, indicate that the structure is functionally obsolete. The bridge no longer serves the needs of the area.

COLUMBIA COUNTY HISTORY:

The boundaries of Columbia County are largely of straight lines, with sharply angular intersections, very roughly fitting to an approximately oval shape. The airline length, north to south, is over 30 miles; east to west, 15 to 20 miles; area, 484 square miles; population, 1950 census, 53,460. The North Branch of Susquehanna River divides it into north and south portions. The North Branch of the valleys have an east to west trend, followed, but not exactly, by the river entering at the east at Berwick, and leaving at the west boundary beyond Catawissa. The various tributary streams, with some exceptions, cut across ridges, north or south of the river. At the extreme north, the County touches the Allegheny plateau at North Mountain, giving rise to some beautiful and rugged scenery north of Benton in the vicinity of Central and Jamison City west of Ricketts Glen State Park. At the extreme south and southeast are other mountains with deposits of anthracite coal, now largely worked out, except in the vicinity of Centralia. Two mountain prongs extend from east, ending abruptly in the central parts. North of the river is Knob Mountain with Orangeville at the foot. South of the river is Catawissa Mountain with Catawissa nestled at its base. Many hills largely in ridges fill the intervening spaces where the slopes are gentle and in the broad intervening valleys is excellent farmland. Where the slopes are steep, there are only forested areas, with occasionally precipitous cliffs, as at the Catawissa Narrows. At this place, a great stone face is to be seen protruding over the highway. The bottom lands along the river and most of the streams also furnish excellent farmland.

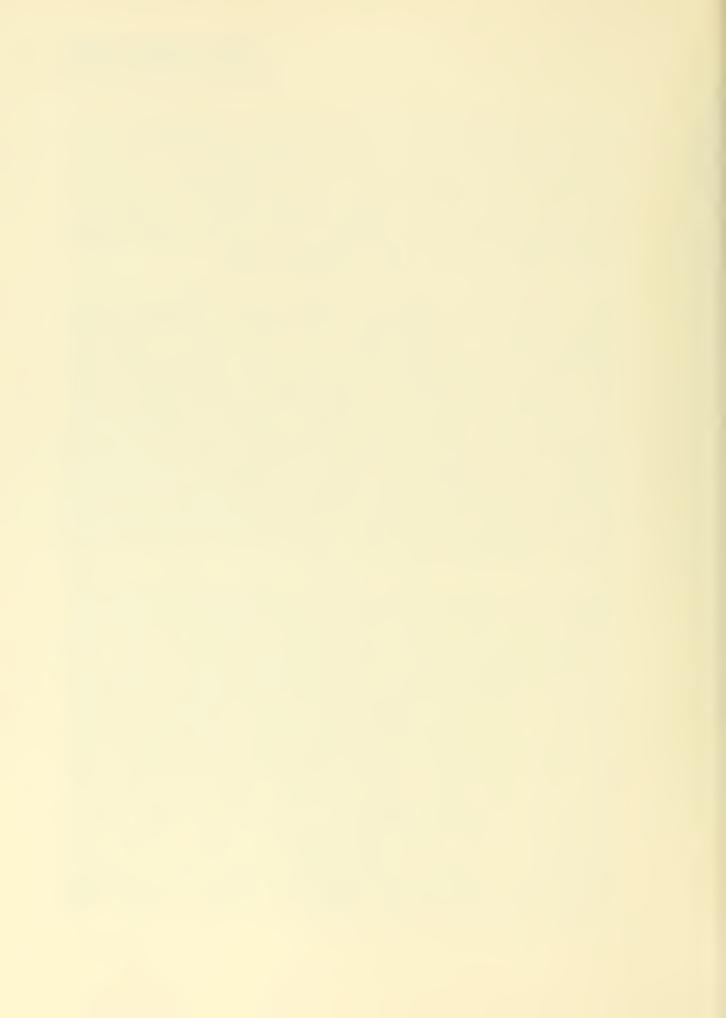
Columbia County was erected from part of Northumberland County, 1813. The name was taken from the then popular song, Hail Columbia, in the patriotic fervor engendered by the War of 1812. Dissatisfaction with the location of the County Seat at Danville, near the western boundary, led to the change to Bloomsburg in 1848 after a preference referendum. Further dissatisfaction led to the separation and erection of Montour County, 1850. This left Columbia with the boundaries substantially as they are now.



The general region had been controlled by the Susquehannock tribe of Indians during the early sixteen hundreds. By the time of William Penn, the Iroquois of New York had defeated and practically exterminated the Susquehannocks. The region then became the camping ground of roving bands of Indians, mostly Delawares and Shawnees. Fur traders and occasional squatters came into the County before its area was purchased from the Indians. The extreme southern end of the County was included in the purchase of 1749, and the remainder of the County in that of 1768, "The New Purchase".

After 1768, settlers immediately began to pour into this region, as well as into other areas of the "New Purchase". Quakers, Scotch Irish, and English predominated in the early settlements, with the English coming in large numbers from New Jersey. During the Revolution, the settlements of this region were on the frontier and suffered from Indian incursions and massacres. Three frontier forts were constructed. Wheeler on lower Fishing Creek, Jenkins on the river below Berwick, and McClure above the mouth of Fishing Creek in the present Town limits of Bloomsburg. Wheeler and Jenkins were attacked more than once by Tories and Indians. The latter was aban-McClure was stockaded by a noted Indian doned and destroyed. fighter, Moses VanCampan, who used it as a center for patrolling the frontier. He also had built Wheeler. Migrations and settlements continued after the Revolution, and within a generation or so after 1800, the region had definitely become one of settled communities. Later developments have brought a cosmopolitan population fairly typical of the Commonwealth as a whole.

Transportation was at first by Indian trails. These trails gave access to the southeast and also to the Susquehanna headwaters in present New York. Gradually, roads and turnpikes were built. Theodore Burr, the great bridge builder, built one of his first pioneering bridges across the North Branch at Berwick in 1814. On the river, canoes, durham boats, keel boats, arks and rafts, the latter two only downstream, carried a heavy burden of traffic for those days, reaching its peak about 1830 when 2,000 craft of various carried cargoes estimated at over \$1,500,000 in value. Although a larger proportion of this traffic originated farther up the river, this region participated to a very important extent. The North Branch Canal, part of the Pennsylvania Canal System, by 1850 had taken over a large portion of this traffic until the canals declined in competition with the railroads, finally ending by 1900. Railroads were secured beginning in 1854 and by 1900, they had reached their peak of importance when branch lines of four Class 1 railroads, and two local lines besides, brought railroad communication to practically every section of the County. improvement of highways and the growth of automobile passenger and truck traffic, the passenger traffic on the railroads has completely disappeared and its freight traffic has seriously declined. The



important U. S. Route 11, traverses the County east to west; the new Keystone Shortway, U. S. 80 also crosses the County from east to west. Further, the Anthracite Expressway, under construction, north to south, will be readily available at the southeast. A network of Legislative Routes and County roads make all sections readily accessible.

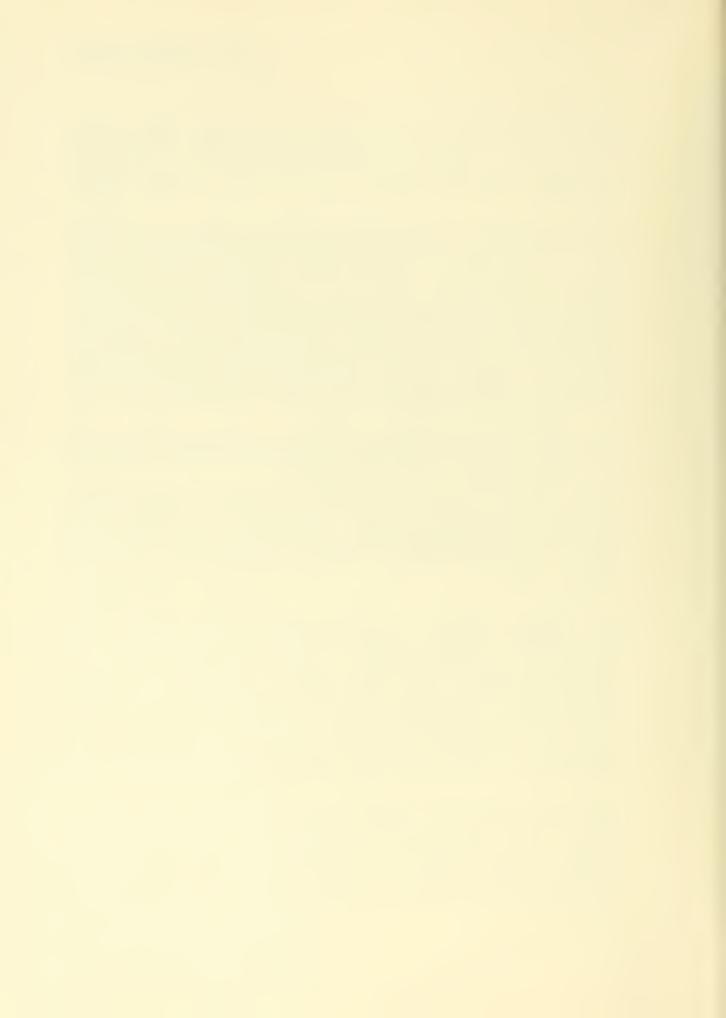
An economy based on pioneer farming, hunting, fishing, and lumbering was early enlarged to include locally based industries of grist mills, saw mills and wood working establishments, potteries, brick making, and tanneries. Locally, rich deposits of iron in the centrally located Montour Ridge led to iron furnaces and foundries, especially important for Bloomsburg and Berwick. This industry was further aided by important deposits of limestone. The ore workings are abandoned, but the limestone industries are still important, although on a reduced scale. A soft shale rock, the Bloomsburg Red Shale, gave rise to a brick industry at Bloomsburg, no longer operating. Similar deposits near Mifflinville support brick and tile industry at that place.

The 150,000 acres of farmland in upwards of 2,000 farms have come to be devoted in considerable part to cattle and dairies, orchards, truck crops, poultry, and Christmas trees.

The once continuous forests were almost completely cut down by 1900. The approximate 150,000 acres of forest lands are coming to be managed on a sustained yield basis. Mine timbers and pulp logs take some of the output, while all types of woodworking - furniture, pallets, rough and fine lumber -- are now produced from the timber lands.

Since 1960, the production of metal and metal parts is the County's most valuable industry, in which Berwick is the leader. The American Car and Foundry Company, Division of the ACF industries, is Berwick's most important industry. The ACF tanks made an important contribution toward winning World War II. Berwick, the largest Borough in the County, had 14,000 inhabitants, 1950 census. Nearby Salem Township and Nescopeck, both in Luzerne County, increase the urban district by several thousands. Berwick is also important for a large potato chip factory and textile industries. It was the first town to be laid out in the county in 1783. Evan Owen, the founder, named it for his birthplace, Berwick-On-The-Tweed.

Bloomsburg, the only incorporated town in Pennsylvania had a population of 10,633 in 1950. Textiles are its most important industry: carpets, rayon processing, and undergarments. It has one of the Country's largest carpet mills. Textile production in the County as a whole, is about half that of metal and metal parts. An extensive floral business is centered in Bloomsburg. It is one of the largest



flower producing communities in the State. A single foundry continues the tradition of the once important iron industries in Bloomsburg. Bloomsburg is also the seat of one of the largest Pennsylvania State Colleges, 1,600 students in 1960. It has a Class 2 Airport. The Bloomsburg Fair, annually held for a week in the early fall, is the largest in Pennsylvania. Horse racing, agricultural, horticultural, mechanical, educational exhibits, and high class entertainment features brought 150,000 paid admission in 1959.

The remaining Boroughs in approximate order of size:

Catawissa: Metal valves and textiles.

Benton: Lumber industries and foundry products.

Millville: Lumber industries and dairy machinery, the latter

for a national and international market.

Orangeville: Hand and factory trucks with a national market.

Mifflinville: As mentioned earlier, brick and tile.

Certain conspicuous County episodes: During the Civil War, rumors of draft resistance led to the military occupation of the County by a regiment of regular soldiers. These incidents were accompanied by some violence and are sometimes referred to as the Fishing Creek Confederacy or the Military Occupation of Columbia County.

The Mollie Maguire disorders of the 1860's and 1870 involved the southern end of the County. Three of the accused were tried at Bloomsburg and hanged.

Columbia Countians who have gained more than local distinction:

Moses VanCampen, referred to before, scout and frontier leader of ranger forces guarding the Susquehanna frontiers during the Revolution.

Charles Rollin Buckalew, State Senator, 1858-1861; United States Minister to Ecuador, 1861-1863; United States Senator, 1863-1869.

William Hartman Woodin, 1868-1934; prominent manufacturer at Berwick; Secretary of Treasury under Franklin D. Roosevelt.

Dr. George Edward Pfahler, 1874-1957; recognized internationally as the pioneer and leader in radium therapy; named internationally as one of the world's five pioneers in radiology.

Dr. Frank Charles Laubach, 1884-; Missionary, educator, preacher; missionary activities include the co-authorship of primers for illiterate adults in over 165 languages, bringing literacy to millions by the plan of "each one teach one".



John Edwin Bakeless, 1894-; Colonel, United States Army, Ret., university teacher, journalist, author, editor, in fields of literature, history, biography, economics, public affairs.

EARLY BLOOMSBURG HISTORY:

Bloomsburg's earliest development was closely associated with the Indian period of American History. The Susquehannock Indians were the first occupants of the Susquehanna River Valley which served as a major travel route into Central New York State. Early contact between white settlers and the Indians was not peaceful, but after the French and Indian War, relationships stabilized and the entire Valley became open for development. The only reminder of the original inhabitants is the legacy of colorful Indian names, such as Susquehanna, Catawissa, Nescopeck, and Shickshinny.

Peaceful settlement brought about an influx of early squatters and land speculators. The protected bottom lands along the river were occupied first, followed by the occupancy of higher lands. In 1772, James McClure came to the area from Lancaster and built a log cabin near the banks of the Susquehanna, within the present Town limits. In 1774, James McClure, Jr., was born in the cabin, becoming the first white child born in this region.

In 1781, a wooden stockade was constructed around the McClure dwelling to offer settlers in the vicinity refuge from Indian attacks. Today, all that remains of the Fort McClure site is a restored one-room cabin which is maintained and opened to the public by members of the Fort McClure Chapter of the D.A.R.

The Bloomsburg area was largely self-sufficient at first, but gradually developed a need to find markets for surplus products. The construction of improved roads encouraged the influx of new settlers and stimulated the economy. The opening of the North Branch Canal and the subsequent development of railroads intensified economic growth and the area began to prosper.

The discovery of iron ore nearby gave rise to a flourishing iron industry that lasted three-quarters of a century.

Bloom Township, as it was known until the mid-1800's, was one of the original 12 townships which comprised Columbia County in 1913. Various portions were taken from it to be added to surrounding townships and in 1870, the remainder was organized as the Town of Bloomsburg.

Bloomsburg has the distinction of being the only incorporated Town in Pennsylvania. A special act of incorporation was passed by the General Assembly on March 4, 1870. The community leaders at that time, found it difficult to set off the built-up section from Bloom



Township in such a manner that it would not leave the remainder of the Township with population too small to support a government. Charles B. Buckalew, a native of the Town and member of the Senate, solved the difficulty by securing the passage of a special set of incorporation.

The turn of the century brought about a substantial change in Bloomsburg's economy. The iron ore was exhausted, and the agricultural base was depleted. New types of business were introduced. Textile mills began to locate here, such as Magee Carpet, and brought increased employment opportunities. These were supplemented by numerous small manufacturing enterprises that established the diversified pattern that characterizes the present economy.

BLOOMSBURG IN 1893: (Bloomsburg Daily, December 7, 1893)

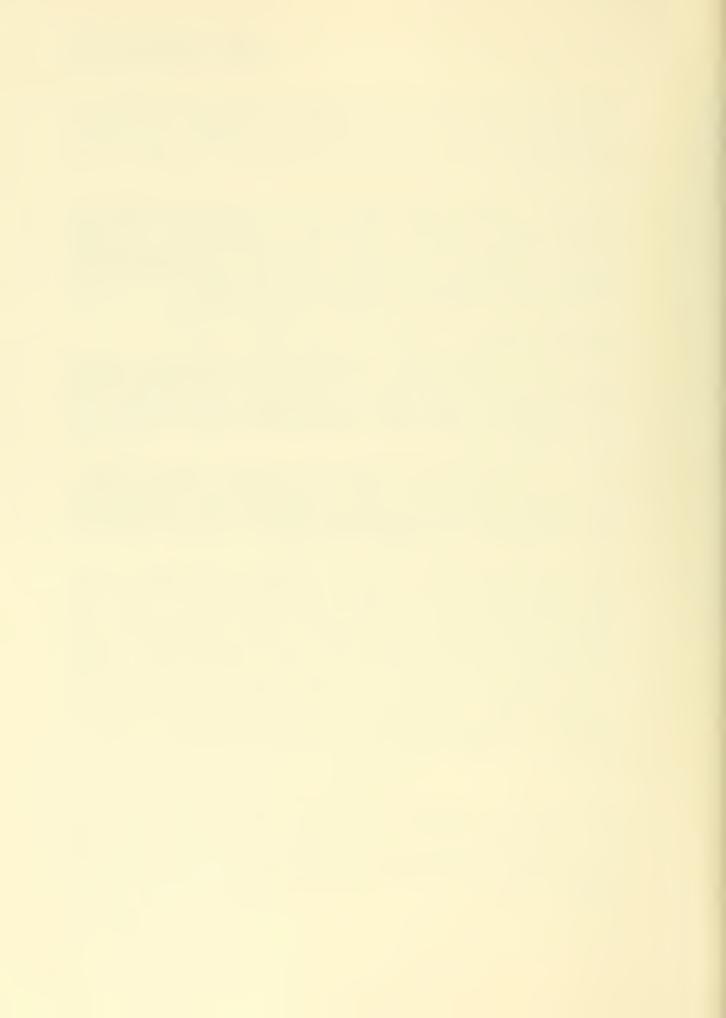
"We are not in a new country. While yet the revolution for independence was in its incipiency, and the dusky trite and grizzly game roamed the undeveloped wilds, the same silvery Fishingcreek and the same majestic Susquehanna was explored and navigated by Mr. James McClure, whose name is associated with Wyoming Township as early as 1772.

While it is not deemed essential to this work that we enter a detailed description of the history and development of this locality, it is proper that there should be embodied a few important facts which have marked the transformation of this prosperous and populous locality from the once trackless wilderness.

The town of Bloomsburg was laid out in 1802 by Ludwig Eyer, and was then known as Oyersburg. Bloom's township was one of the original twelve which comprised the county in the organization in 1813. What remained after taking from it a part of Mount Pleasant, a part of Orange, a part of Centre and the whole of Scott, was organized by Act of Assembly of March 4, 1870, as the "Town of Bloomsburg". The town is built on a high bluff on Fishingcreek, about two miles northeast of the mouth of the creek, and about one-half mile north of the Susquehanna river. There is no more healthy locality in the stateapure atmosphere and a perfect natural sewerage make it in no wise wonderful that the community has enjoyed so successful a past, so prosperous a present, and promises so bright a future.

STATISTICAL.

The population of Bloomsburg has shown continuous and rapid growth, and in the past three years has increased in a manner quite indicative of its constituency—a citizenship of liberality, energy, push. In 1880 there were resident in the town, 3,702 people; in 1890, 4,635, and at the present time a modest estimate places the number at 6,000.



A TOWN OF HOMES.

Truly, 'tis a town of homes. From his first arrival, the visitor must admire the substantiality and artistic beauty of the residences which line every street; and which, from the palatial habitation to the neat but inexpensive domicile are owned in most instances by the occupant. Land may be had at reasonable prices, and the landlords are of that liberal and enterprising disposition which permeates the whole people.

MANUFACTURES.

Given an accumulation of raw material, cheap power and proper facilities for transportation, and there must be industry. Bloomsburg has all of these. Iron ore in abundance; easy access to the lumber and coal regions; a water course capable of developing eight hundred horse power; a canal; three railroads in the town and one more to be connected by the new river bridge. The inducements to manufacturers are superior to those of large towns, since while here all the conditions to business are so favorable, the cost of living and therefore of labor and again of production is much lower.

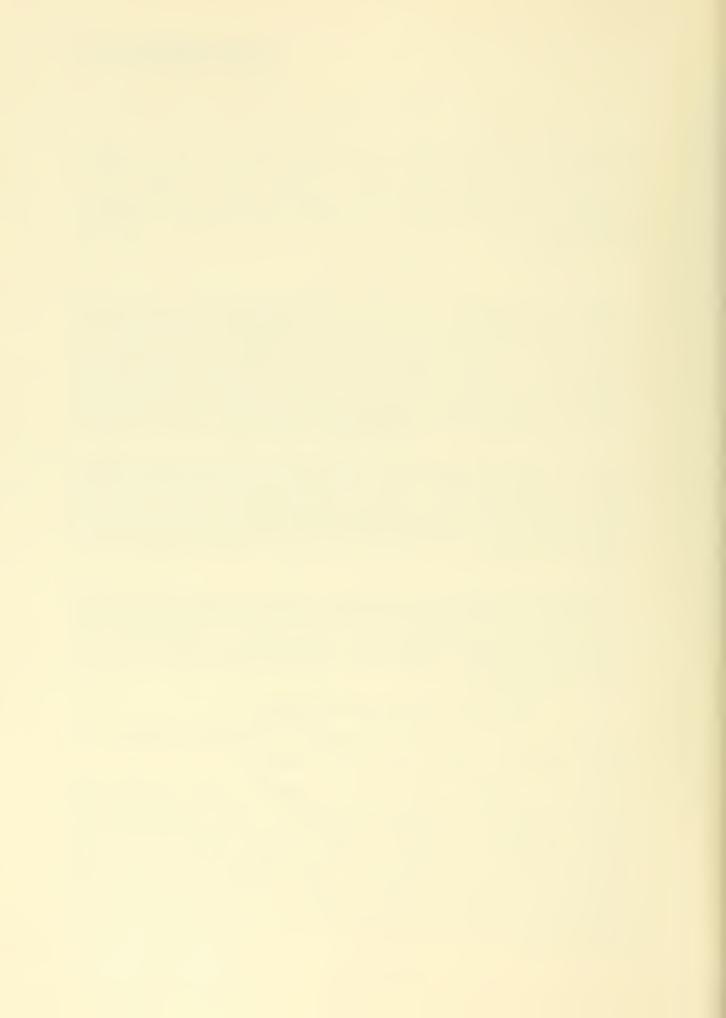
There are now in operation over thirty manufacturing establishment, engaged in the production of as many classes of commodities, beside many small enterprises. It is a remarkable fact that during the present season while almost all industry has been stagnant, not only through this section and the state, but throughout the whole country, there has not been an idle wheel here, but everybody busy and all content.

The community is especially fortunate in possessing men qualified in capital and energy to push the town to the far front position which it now occupies; and these are the men who have lent encouragement to many of the present industries, and who are ever ready to offer inducement to anything which means prosperity to the town and advantage to its citizens.

EDUCATIONAL FACILITIES AND CHURCHES.

The question of education has received considerable attention as might reasonably be expected in such a community.

The Public Schools occupy three commodious and well-equipped buildings, situated: one on Fifth street, one on Third street, and the High School at First and Centre Streets. In all, there are thirteen departments or grades, engaging twenty teachers and one Principal, whose duties are not unlike those of a city superintendent. The enrollment varies between nine hundred and fifty, and one thousand students, to whom three courses are offered in the High School--Scientific, Business and Normal; and graduates from the Normal Course are admitted to the Senior Class in the State Normal School.



The religious denominations, of which there are nine, have large followings and occupy handsome edifices. These comprehend the Baptist, Lutheran, Evangelical Association, Methodist, Presbyterian, Episcopal, Reformed, Catholic and African Methodist.

WATER WORKS, STREETS, ETC.

Good water is an essential to any community; and is here supplied from an inexhaustable supply--clear, sparkling and pure. The natural topography of the town affords a perfect sewerage both to the river and the mouth of Fishingcreek, while the canal serves to drain a considerable section of any malarial or other infectious danger.

As a protection against the ravages of fire, there is a wellorganized fire department, comprising three volunteer companies, composed of experienced and valiant workers.

Electric light, both arc and incandescent, is well and continuously served; and being freely distributed through the streets renders the town attractive and safe to the nocturnal pedestrian.

A most remarkable feature are the broad, clean, well-paved streets. From south Second Street, looking toward the Normal School buildings, one is reminded of admiring Philadelphia's Public Buildings from North Broad Street. Nor is there but one such, for what may be said of one, may be said of every thoroughfare in the town.

PROSPECTS.

And how could mortal mind foretell the future of such a community? An intellectual and religious people, aggressive and conscientious leaders, numerous advantages and resources both natural and developed, and with all plenty of capital to push themselves to the front, Bloomsburg may confidently expect, and will certainly realize: peace, prosperity, plenteousness—a bountiful future."

TOWN OF BLOOMSBURG TODAY:

Bloomsburg is the Seat of Columbia County, the home of Bloomsburg University of Pennsylvania, a thriving industrial community and is Pennsylvania's only officially designated town.

Situated on the North Branch of the Susquehanna River between Sunbury and Wilkes-Barre, Bloomsburg lies between the river and low-lying mountains to the north. It is 18 miles north of Centralia and 38 miles south of Wilkes-Barre.

This pleasant little town has been nicknamed the "parlor town of the Susquehanna Valley", because of its wide, well-kept streets lined with spreading trees and well-maintained homes.



A look at Bloomsburg's history shows that this always has been a charming town.

In 1769, Francis Stewart surveyed a large tract of land here and called it Beauchamp, a French word for "beautiful field". In 1772, James McClure secured title to the land, which then was called McClure's Choice.

Ludwig Eyer laid out the Town in 1802. In the next few years, it had a variety of names: Eyertown, Eyerstown, Oyertown, Oyerstown, Eyerburgh, Eyerstaedtel, Eyerstraetel and Oyerstraetel. By 1807, the Town needed a post office and a name.

The origin of Bloomsburg's name is a mystery, although there are several theories:

It was named for Samuel Bloom, a Northumberland County Treasurer and Commissioner.

It was named by travelers who saw the hills covered with blooming Laurel trees.

It was named for the "bloomeries", ironmaking furnaces that created iron bars.

It was named after Bloomsburg, N.J., from which some earlier settlers came.

Whatever the origin of the name, the Town was called Bloomsburgh for two decades. Eventually, the "h" was dropped from the name. In 1847, after a long battle with Danville, Bloomsburg became the County Seat.

In those days, the midstate had a network of canals that followed the Susquehanna River. The canal here converted Bloomsburg into a trading center, and by the middle of the century, Bloomsburg was the site of extensive iron ore mining. Forges converted the iron ore into usable metal and sent it down-river to southeast Pennsylvania.

In 1870, a State senator successfully sponsored legislation that created towns as distinct from villages and boroughs. Bloomsburg applied for such status and became the State's first and only town.

After the iron industry and canal system declined, Bloomsburg turned to the textile industry. In 1889, James Magee, II, founded Magee Carpet Company with a few carpet looms, a handful of employees, a small building, a little money and a lot of energy and determination.



The Company grew slowly and steadily, making ingrain and Brussels carpets and rugs. Now, it is part of Magee Industrial Enterprises, which owns the Hotel Magee, a charming, old-fashioned inn with a popular restaurant; Magee Glanz Carpet Company, MIE Hospitality Inc., WHLM radio station and Arthur Treacher's, as well as Magee Carpet Company.

Today, Bloomsburg is home to 11,700 people, including Bloomsburg University students. Mayor Daniel J. Bauman, a six-member Town Council and a 12-member police force operates out of a beautifully restored turn-of-the-century firehouse. Bloomsburg has its own hospital, a well-stocked library, and a newspaper, the Press-Enterprise.

Residents get fire protection from four fire stations - Friendship, Liberty, Rescue Hose & Ladder Co. and Winona - and emergency medical services from Bloomsburg Volunteer Ambulance Association.

In a town, the mayor is president of council and a member of council. All our Council people are elected at large.

Bloomsburg today is one of the most progressive communities in northeast Pennsylvania, if not in the State.



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LIST OF PREPARERS:

FINAL DESIGN CONSULTANT AND PREPARER OF HISTORIC AMERICAN ENGINEER RECORD HISTORIC DOCUMENTATION OF EAST BLOOMSBURG BRIDGE:
MODJESKI AND MASTERS, CONSULTING ENGINEERS, HARRISBURG, PA

Text Written By: Russell W. Christie, P. E., Project Manager, Modjeski and Masters

MEMORANDA

THE KING BRIDGE CO.

Contract No.

WITH

Lesse Rittenhouse & Flegor Colombia Comme De Colombia Comby Pa

Extreme Length //50.

Roadway.

No. of Spans

Style

Date

Price

To be Completed

Shipping Point.

Correspondent

Address

Lumber ordered of.

Address

Price

Lumber Bill.

per 1000 feet.



No HAER NO. PA-100 (PAGE 24)
This Contract, Made this 24 day of November A. D. 1893
by and between THE KING BRIDGE CO., of the City of Cleveland and State of Ohio, party of the first part,
and The Country of Columbia by and through her Commissions
Jesse Rittenhouse, B. F. Edgar, and C. L. Sands
of the County of Column bia and State of Pennsylvania, party of the second part;
The coals
paint one coat at shope, and have ready by the Tirst day of Cetober 1894
for the party of the second part, the superstructure for a Wrongle I Son Bridge
over the stream called Stre Disquelianda River at apoint where the
Bloom Terring Road crosses said stream in the
County of Coloradia and State of Louis of Livariaccording to the following dimensions, viz:
11/70
Court I down All Court of All days to 177 d
Space between the face of Abutments or Waterway,
Sidewalks,
Number of Spans, six (6) equal spans
All the materials for said bridge, except the abutments and piers, are to be furnished by the party of the first part. Speci-
fications and Plans approved form a part of this Contract. The center line of bridge to be at right angles to the abut-
ments and piers. Delay in approving plans or furnishing necessary data, plans, specifications, etc., by party of the second
part to party of the first part shall extend the time of completion an equal number of days.
And the party of the second part contracts and agrees to furnish, ready for the superstructure, the abutments and piers
for said bridge, by the First day of Clasgust . A. D. 1894 and to pay the party of the first part the
sum of Thirtyfive Thousand Five Hundred (35500 Too) - Dollars
for the said Bridge, payable as follows, viz: In monthly estimates upon acceptable material, at the shops, delivered on
the ground, and in course of erection, nincty per cent. of the amount of such estimates, to be paid in cash within five days
from date of estimate, the remaining ten per cent. to be paid in each on final completion and acceptance of the work herein
specified, or one-half on the day of delivery of the iron motorial of said Bridge at.
• • • • • • • • • • • • • • • • • • • •
Station and the remaining one half on the completion of said Ruides. In case the abutments and piers are not ready for the
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Advisory Council On Historic Preservation

The Old Post Office Building 1100 Pennsylvania Avenue, NW. #809 Washington, DC 20004

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Mr. Louis M. Papet Division Administrator Federal Highway Administration 228 Walnut Street P.O. Box 1086 Harrisburg, PA 17108-1086

East Bloomsburg Bridge Replacement Bloomsburg, Pennsylvania

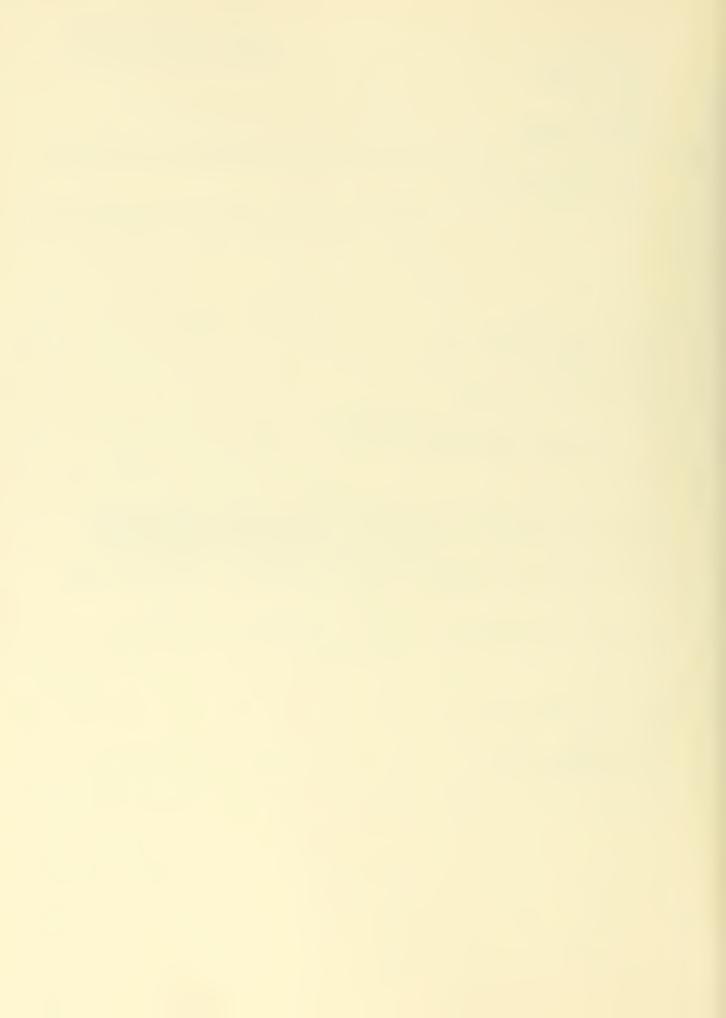
Dear Mr. Papet:

The enclosed Memorandum of Agreement for the referenced project has been ratified by the Chairman of the Council. This document constitutes the comments of the Council required by Section 106 of the National Historic Preservation Act of 1966, as amended, and the Council's regulations. A copy of the ratified Agreement has also been sent to the Pennsylvania State Historic Preservation Officer.

The Council appreciates your cooperation in reaching a satisfactory resolution of this matter.

Don L. Klika Chief, Kastern Division of Project Review

Enclosure



MEMORANDUM OF AGREEMENT

WHEREAS, the Federal Highway Administration (FHWA), and the Pennsylvania Department of Transportation (PennDOT) have determined that replacement of the the East Bloomsburg Bridge over the Susquehanna River at Bloomsburg, Columbia County, Pennsylvania, will have an effect upon properties included in, or eligible for inclusion in, the National Register of Historic Places and have requested the comments of the Advisory Council on Historic Preservation pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. 470) and its implementing regulations, "Protection of Historic and Cultural Properties (36 CFR, Part 800),"

NOW, THEREFORE, the FHWA, PennDOT, the Penusylvania State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties:

Stipulations

FHWA will insure that the following measures are carried out:

- 1. Prior to the demolition of the East Bloomsburg Bridge, it will be recorded so that there will be a permanent record of its existence. The Historic Architectural and Engineering Record (HAER) (National Park Service, Department of the Interior, Washington, D.C. 20243 (202)343-9629); will first be contacted to determine what documentation is required. All documentation must be accepted in writing by HAER and the Council notified of its acceptance prior to the demolition. Copies of this documentation will be made available to the SHPO and appropriate local archives designated by the SHPO.
- 2. Within 90 days after demolition of the East Bloomsburg Bridge, FHWA will notify the Keeper of the National Register so that the bridge may be removed from the list of eligible properties.
- 3. FHWA will insure that a permanent plaque commemorating the history and eignificance of the East Bloomsburg Bridge will be placed near the site, within TR 487's right-of-way, once construction has been completed. The Pennsylvania SHPO will be given an opportunity to review the content of the plaque before it is erected.

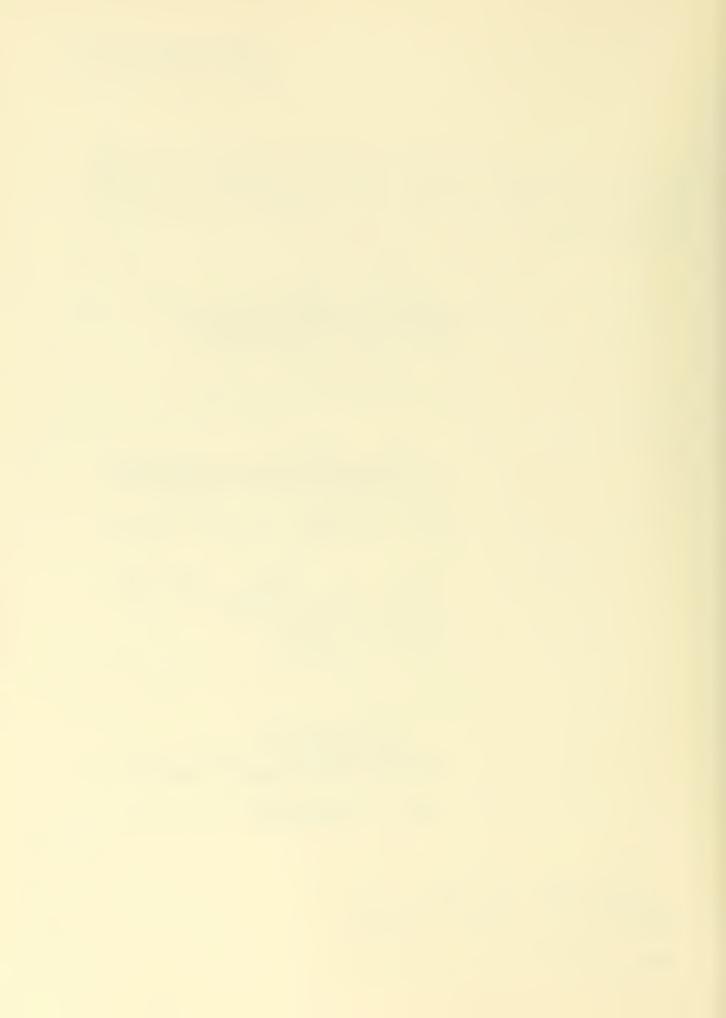


Execution of this Memorandum of Agreement evidences that the FHWA and PennDOT have afforded the Council a reasonable opportunity to comment on the proposed bridge replacement and its effects on historic properties and that the FHWA and PennDOT have taken into account the effects of its undertaking on historic properties.

Advisory Council on Historic Preservation

DATE 12

Pennsylvania Division Administrator Federal Highway Administration U.S. Department of Transportation Deputy Secretary for Highway Administration Pennsylvania Department of Transportation DATE 9-28-84 Pennsylvania State Historic Preservation Officer Executive Director Advisory Council on Historic Preservation



PHOTOGRAPH CAPTION LIST

NUMBER	CAPTION	REFERENCE SOURCE
1.	North End Span - North Portal showing Commemorative Plaque and Finial	Original Photograph - November 20, 1985
2.	North End Span - View looking south at End Portal	Original Photograph - November 20, 1985
3.	North End Span - View looking south at End Portal with close-up of Portal Bracing	Original Photograph - November 20, 1985
4.	North End Span - East Side view at Floor Level	Original Photograph - November 20, 1985
5.	North End Span - View of West Bearing at Panel Point L0	Original Photograph - November 20, 1985
6.	North End Span - West side view of complete truss	Original Photograph - November 20, 1985
7.	North End Span - View showing sway bracing frame at Panel Points 2 and 4 and also top lateral bracing	Original Photograph - November 20, 1985
8.	North End Span - Close-up of Panel Point U1 at finial	Original Photograph - November 20, 1985
9.	North End Span - Close-up of Panel Point U2	Original Photograph - November 20, 1985
10.	North End Span - Close-up of Panel Point M3	Original Photograph - November 20, 1985
11.	North End Span - Close-up of Panel Point U3	Original Photograph - November 20, 1985
12.	North End Span - Close-up of Panel Point U4	Original Photograph - November 20, 1985
13.	North End Span - Close-up of Panel Point M4	Original Photograph - November 20, 1985
14.	North End Span - Close-up of Panel Point U5	Original Photograph - November 20, 1985



NUMBER	CAPTION	REFERENCE SOURCE
15.	Close-up of bearings at Panel Point L0 on Pier 5	Original Photograph - November 20, 1985
16.	View of north abutment and east wingwall	Original Photograph - November 20, 1985
17.	View of north abutment and west wingwall	Original Photograph - November 20, 1985
18.	North End Span - West side view of under part of floor system at Panel Point L2	Original Photograph - November 20, 1985
19.	North End Span - View looking south at Pier 5 and truss floor system	Original Photograph - November 20, 1985
20.	View looking east showing flood gauge station at northeast wingwall	Original Photograph - November 20, 1985
21.	View of east side of bridge showing Span No. 5	Original Photograph - November 20, 1985
22.	View of east side of bridge showing all six spans	Original Photograph - November 20, 1985
23.	View of east side of north end span (Span No. 6)	Original Photograph - November 20, 1985
24.	View of west side of bridge showing Span No. 5 and Piers 4 and 5	Original Photograph - November 20, 1985
25.	North End Span - View showing floor- beam and stringers at Panel Point L1	Original Photograph - November 20, 1985
26.	View looking south showing flood gauge station at northeast corner of bridge	Original Photograph - November 20, 1985
27.	View of full bridge looking southeast	Original Photograph - November 20, 1985



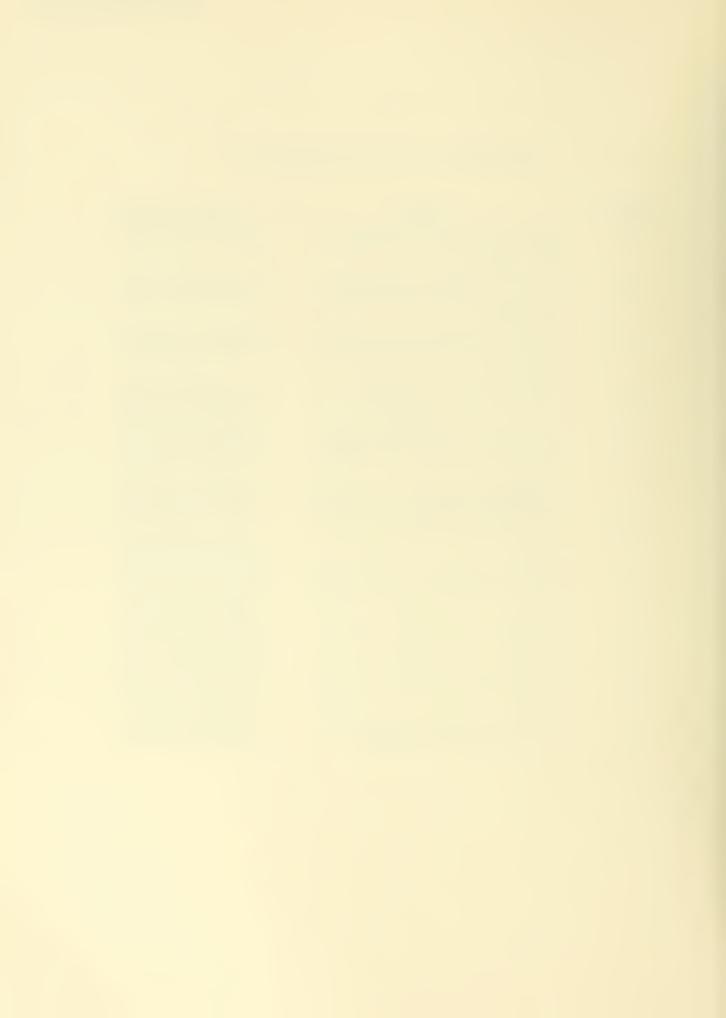
NUMBER	CAPTION	REFERENCE SOURCE
28.	Close-up of commemorative name- plate plaque located at top of portal of north end span	Original Photograph - November 20, 1985
29.	Close-up of commemorative plaque designating the re-flooring of the bridge in 1914	Original Photograph - November 20, 1985
30.	South End Span - View looking north at end portal	Original Photograph - November 20, 1985
31.	South End Span - View looking north at end portal with close-up of portal bracing and finial	Original Photograph - November 20, 1985
32.	South End Span - West side view at floor level	Original Photograph - November 20, 1985
33.	South End Span - West side view of Panel Point L1	Original Photograph - November 20, 1985
34.	South End Span - View of bearing at Panel Point LO	Original Photograph - November 20, 1985
35.	South End Span - View showing sway bracing frame at Panel Points 2 and 4 and also top lateral bracing	Original Photograph - November 20, 1985
36.	South End Span - Close-up of Panel Point U1 at finial	Original Photograph - November 20, 1985
37.	South End Span - Close-up of finial at Panel Point U1	Original Photograph - November 20, 1985
38.	South End Span - Close-up of Panel Point U2	Original Photograph - November 20, 1985
39.	South End Span - Close-up of Panel Point M3	Original Photograph - November 20, 1985



NUMBER	CAPTION	REFERENCE SOURCE
40.	South End Span - Close-up of Panel Point U3	Original Photograph - November 20, 1985
41.	South End Span - Close-up of Panel Point U4	Original Photograph - November 20, 1985
42.	South End Span - Close-up of Panel Point M5	Original Photograph - November 20, 1985
43.	South End Span - Close-up of Panel Point U5	Original Photograph - November 20, 1985
44.	Close-up of bearings at Panel Points LO on Pier 1	Original Photograph - November 20, 1985
45.	View of south abutment and east wingwall	Original Photograph - November 20, 1985
46.	View of south abutment and west wingwall	Original Photograph - November 20, 1985
47.	View of east side of bridge showing Span 2 and Piers 1 and 2	Original Photograph - November 20, 1985
48.	North End Span - View of side and floor system	Original Photograph - November 20, 1985
49.	Original drawing showing 1928 repairs and additions to floor system and plan and elevation of bridge	Pennsylvania Depart- ment of Transportation - Engineering District 3-0 Files
50.	Original drawing by King Bridge Company showing truss member details and elevation of bridge	Columbia County Court- house Basement Files
51.	Original drawing by King Bridge Company showing truss member shop details - Sheet 2 of 5	Columbia County Court- house Basement Files



NUMBER	CAPTION	REFERENCE SOURCE
52.	Original drawing by King Bridge Company showing truss member shop details - Sheet 3 of 5	Columbia County Court- house Basement Files
53.	Original drawing by King Bridge Company showing joist and shoe details - Sheet 4 of 5	Columbia County Court- house Basement Files
54.	Original drawing by King Bridge Company showing end portal shop details - Sheet 5 of 5	Columbia County Court- house Basement Files
55.	Original drawing by unknown - south abutment and wingwall details	Columbia County Court- house Basement Files
56.	Original drawing by unknown - details of cofferdam for Pier 1 to be founded on rock	Columbia County Court- house Basement Files
57.	Original drawing by unknown - details of caisson for Piers 2, 3, 4 and 5 to be built on soil overburden	Columbia County Court- house Basement Files
58.	Original drawing by unknown - Pier 1 details	Columbia County Court- house Basement Files
59.	Original drawing by unknown - Pier 2 details	Columbia County Court- house Basement Files
60.	Original drawing by unknown - Pier 3 details	Columbia County Court- house Basement Files
61.	Original drawing by unknown - Pier 4 details	Columbia County Court- house Basement Files
62.	Original drawing by unknown - Pier 5 details	Columbia County Court- house Basement Files
63.	Original drawing by unknown - north abutment and wingwall details	Columbia County Court- house Basement Files



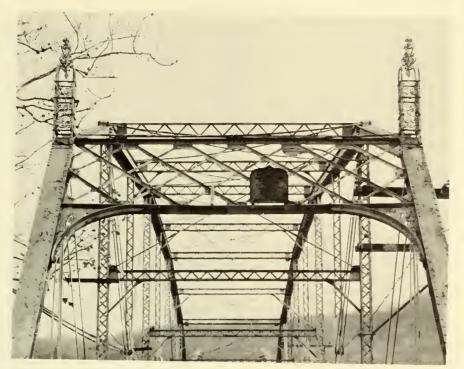


 North End Span - North Portal showing Commemorative Plaque and Finial



2. North End Span - View looking south at End Portal

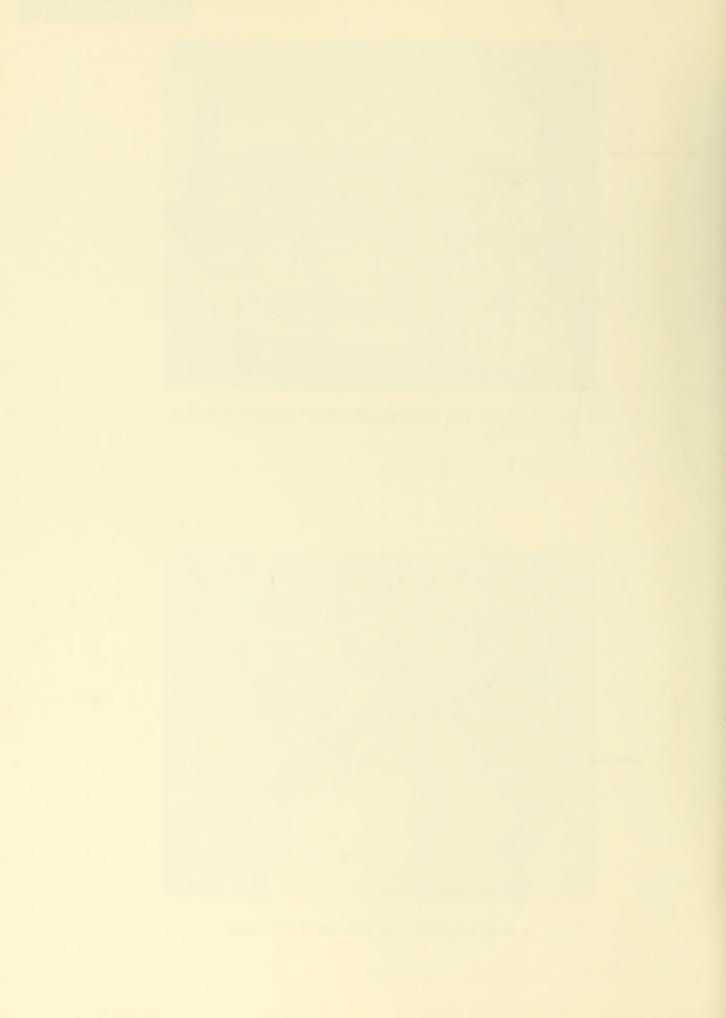


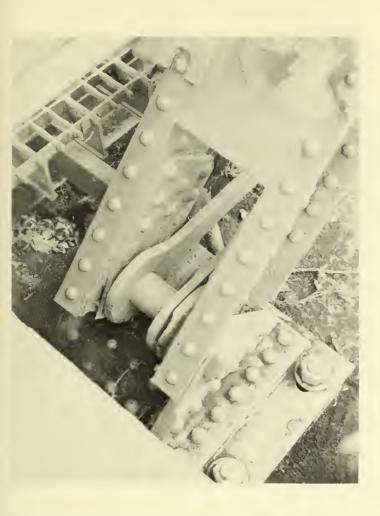


3. North End Span - View looking south at End Portal with close-up of Portal Bracing



4. North End Span - East Side view at Floor Level



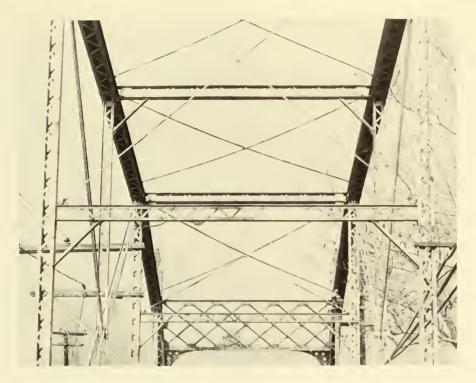


5. North End Span - View of West Bearing at Panel Point LO



6. North End Span - West side view of complete truss



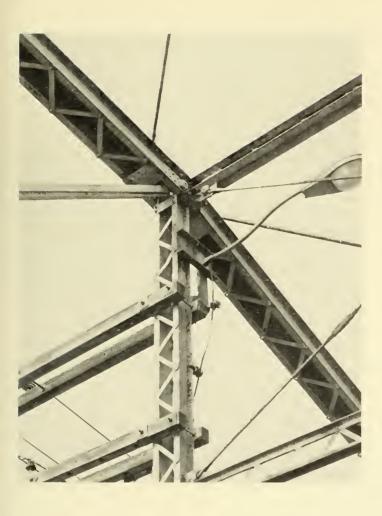


7. North End Span - View showing sway bracing frame at Panel Points 2 and 4 and also top lateral bracing

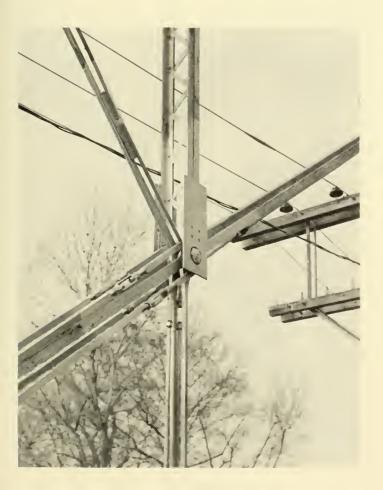


8. North End Span - Close-up of Panel Point U1 at finial





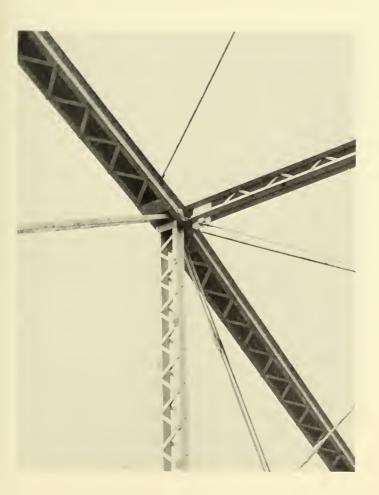
9. North End Span - Close-up of Panel Point U2

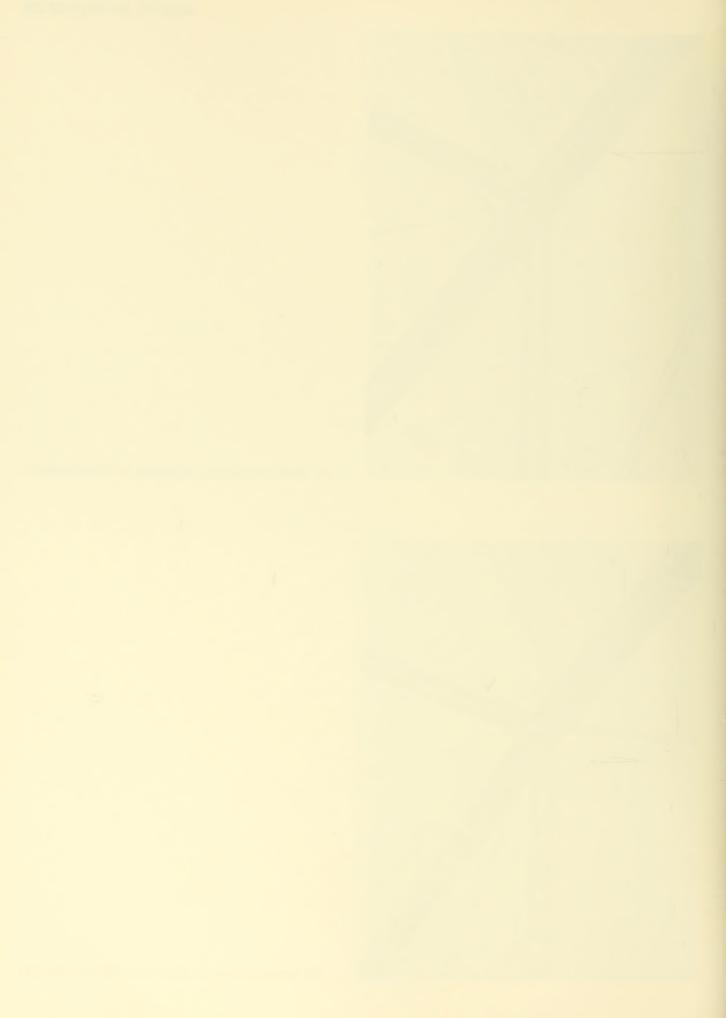


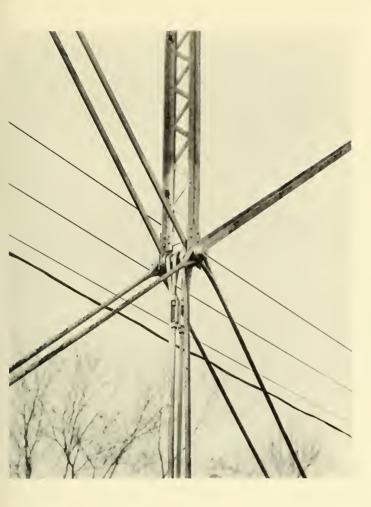




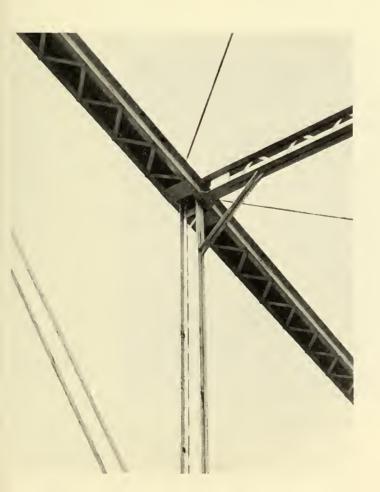
11. North End Span - Close-up of Panel Point U3



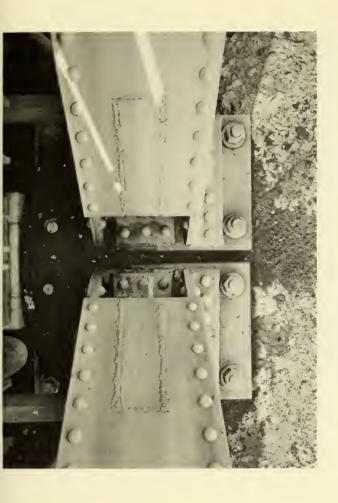




13. North End Span - Close-up of Panel Point M4



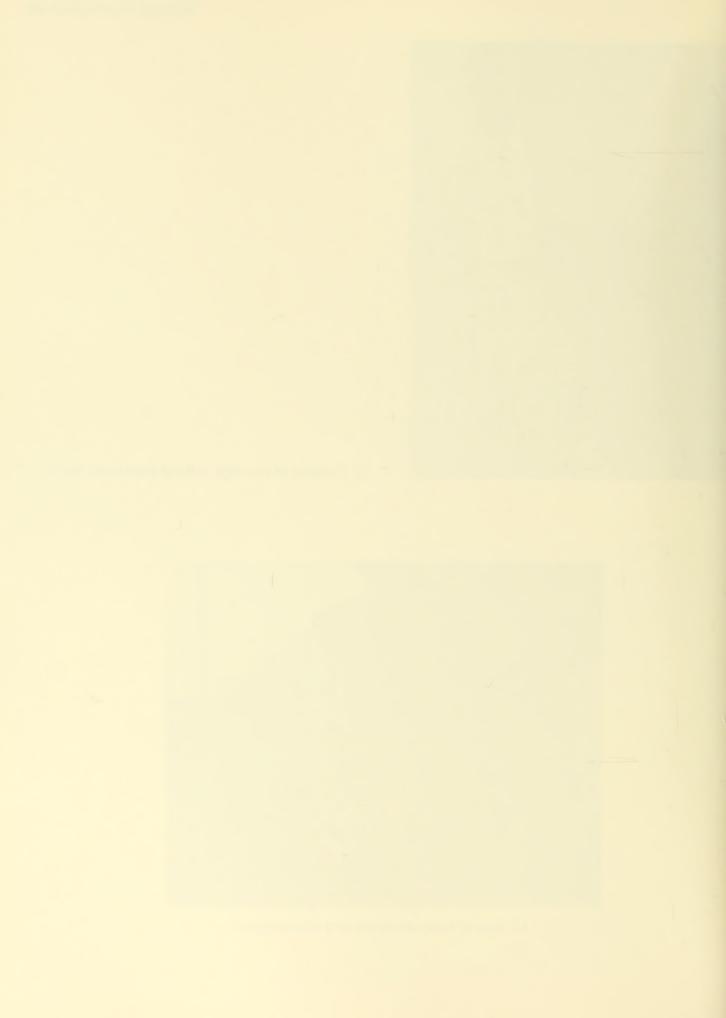




15. Close-up of bearings at Panel Point LO on Pier 5



16. View of north abutment and east wingwall





17. View of north abutment and west wingwall



18. North End Span - West side view of under part of floor system at Panel Point L2





19. North End Span - View looking south at Pier 5 and truss floor system



20. View looking east showing flood gauge station at northeast wingwall





21. View of east side of bridge showing Span No. 5



22. View of east side of bridge showing all six spans



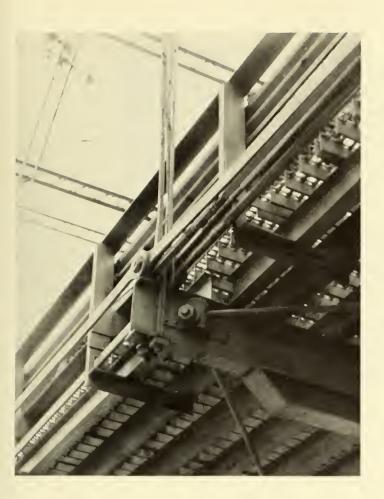


23. View of east side of north end span (Span No. 6)



24. View of west side of bridge showing Span No. 5 and Piers 4 and 5





25. North End Span - View showing floorbeam and stringers at Panel Point L1



26. View looking south showing flood gauge station at northeast corner of bridge





27. View of full bridge looking southeast



28. Close-up of commemorative nameplate plaque located at top of portal of north end span





29. Close-up of commemorative plaque designating the re-flooring of the bridge in 1914



30. South End Span - View looking north at end portal





31. South End Span - View looking north at end portal with close-up of portal bracing and finial

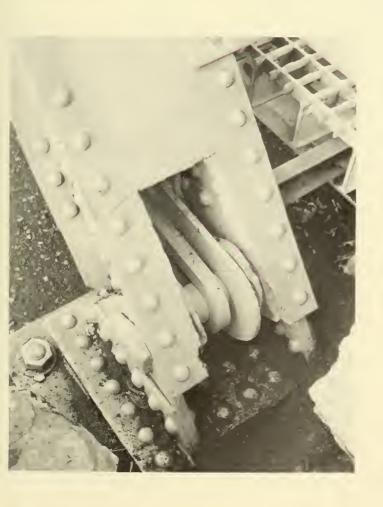


32. South End Span - West side view at floor level



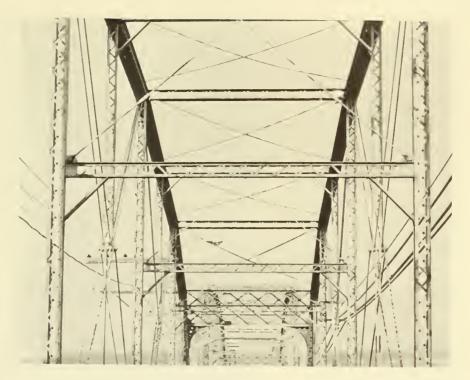


33. South End Span - West side view of Panel Point L1



34. South End Span - View of bearing at Panel Point LO





35. South End Span - View showing sway bracing frame at Panel Points 2 and 4 and also top lateral bracing



36. South End Span - Close-up of Panel Point U1 at finial

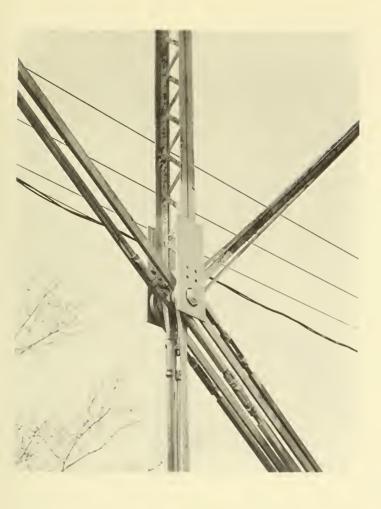




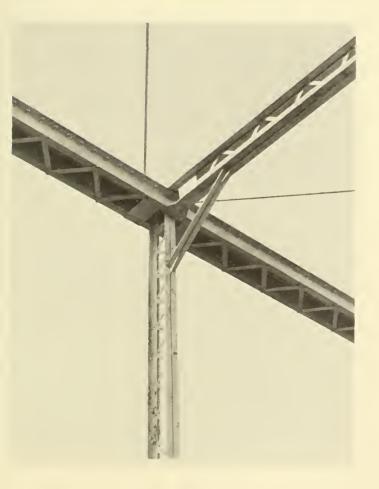
37. South End Span - Close-up of finial at Panel Point U1

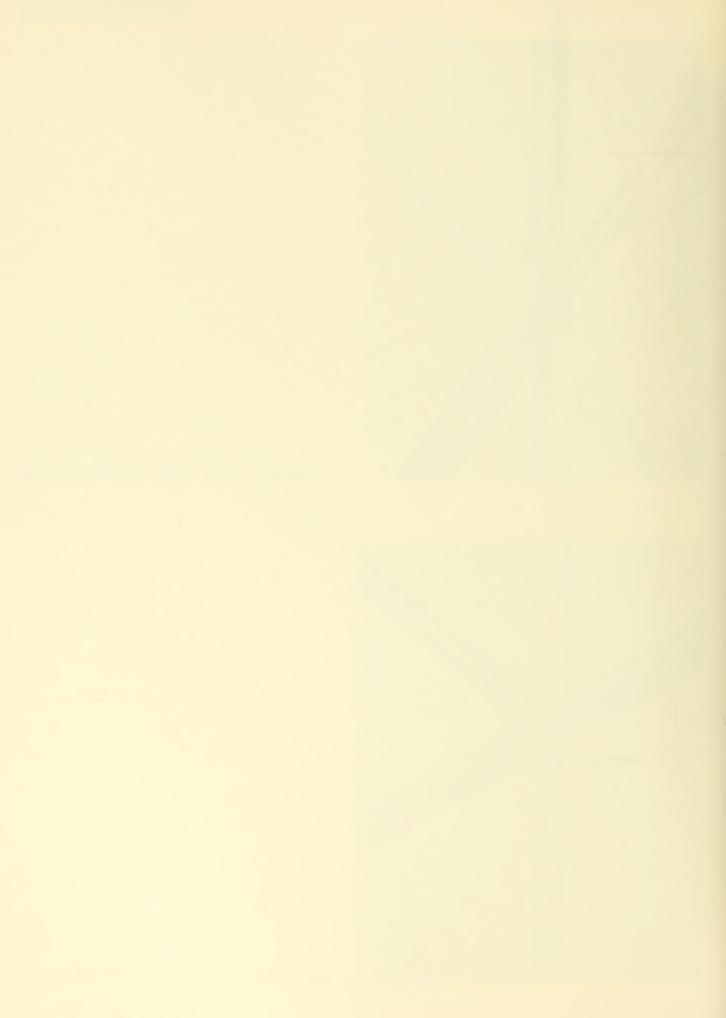






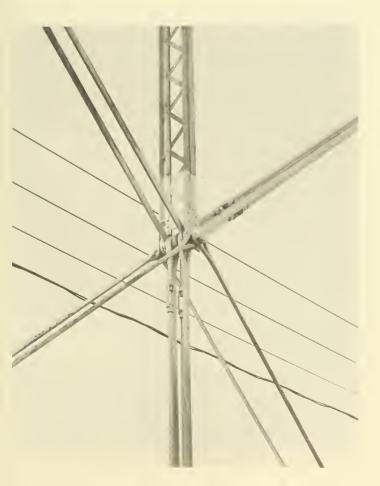
39. South End Span - Close-up of Panel Point M3



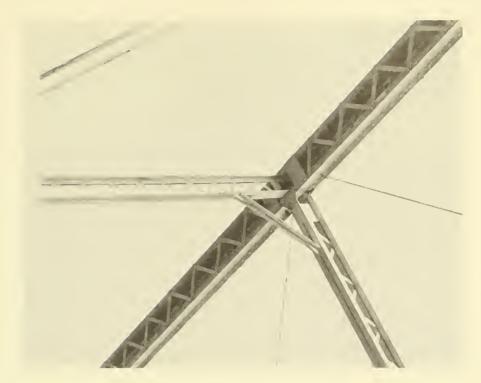




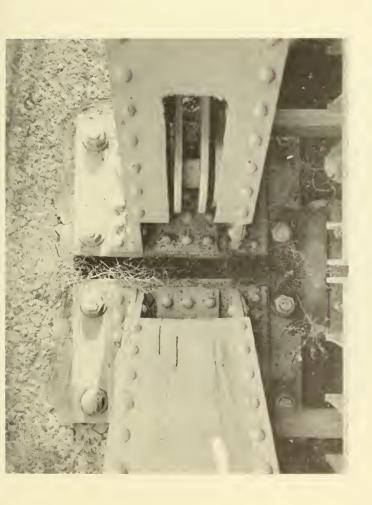
41. South End Span - Close-up of Panel Point U4







43. South End Span - Close-up of Panel Point U5



44. Close-up of bearings at Panel Points LO on Pier 1





45. View of south abutment and east wingwall



46. View of south abutment and west wingwall



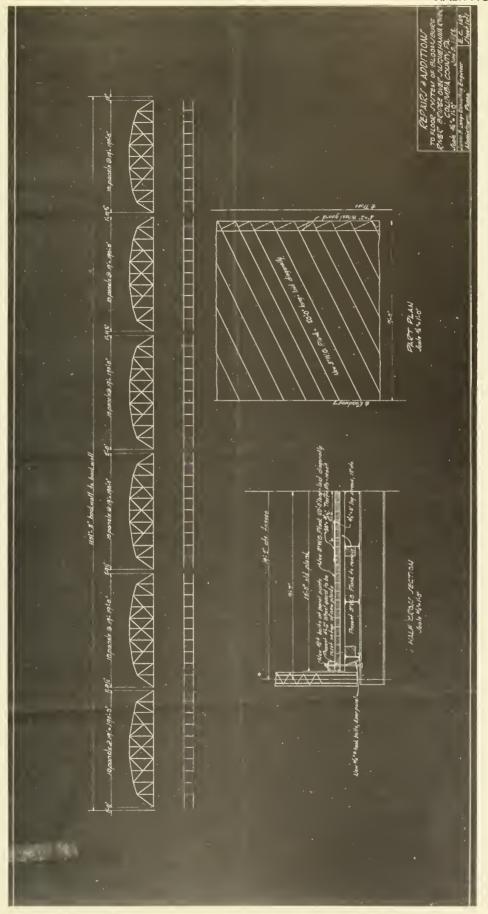


47. View of east side of bridge showing Span 2 and Piers 1 and 2



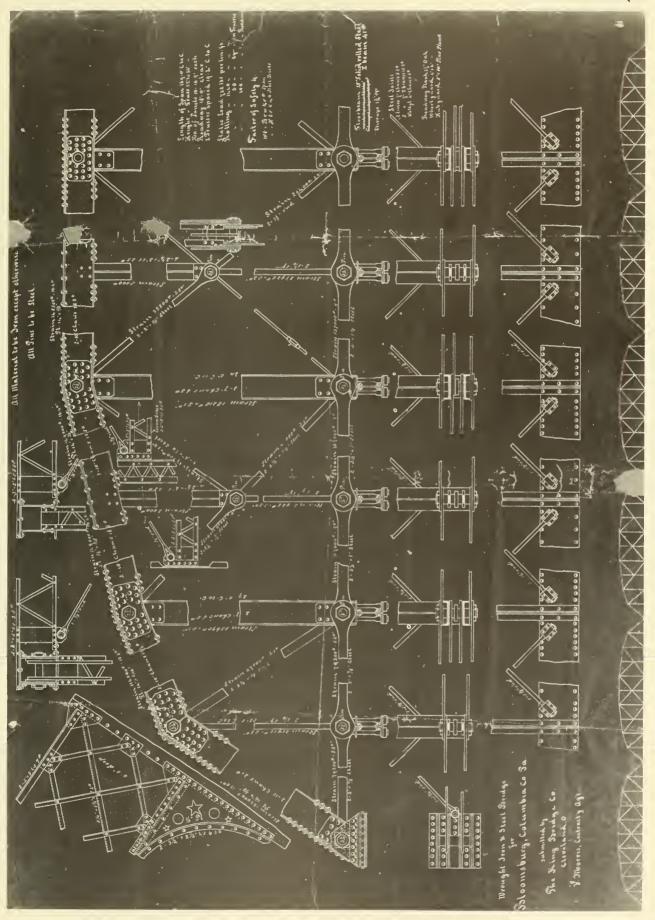
48. North End Span - View of side and floor system





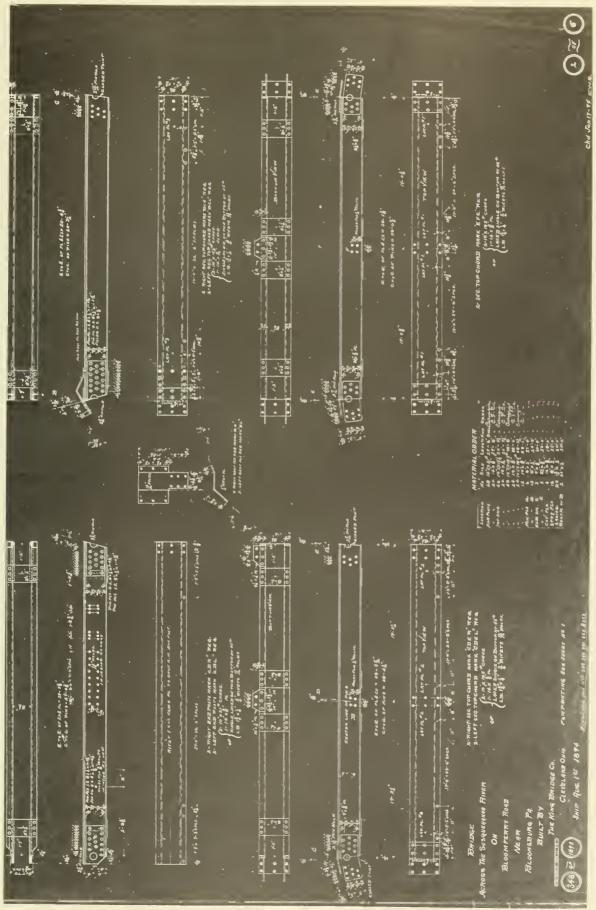
49. Original drawing showing 1928 repairs and additions to floor system and plan and elevation of bridge





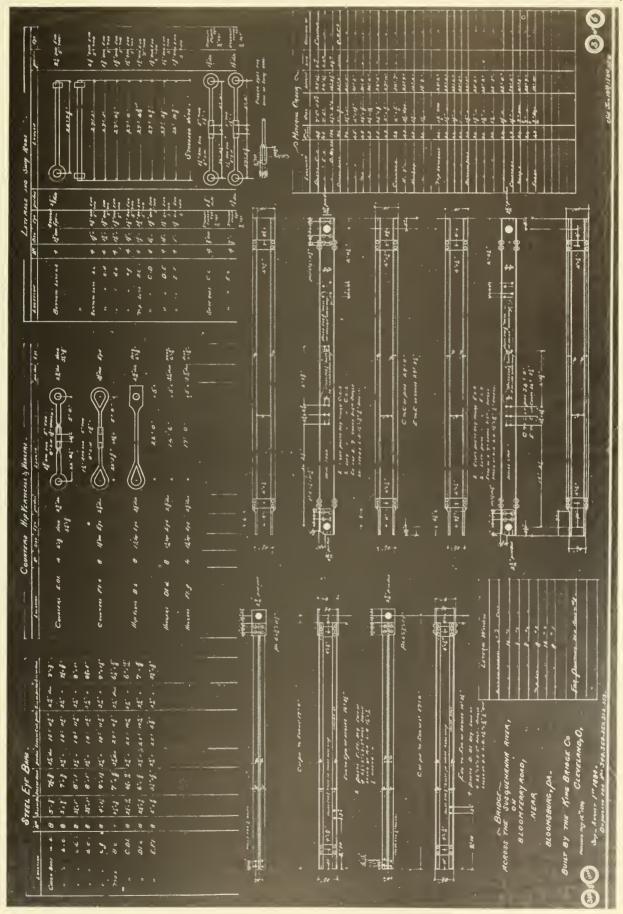
50. Original drawing by King Bridge Company showing truss member details and elevation of bridge





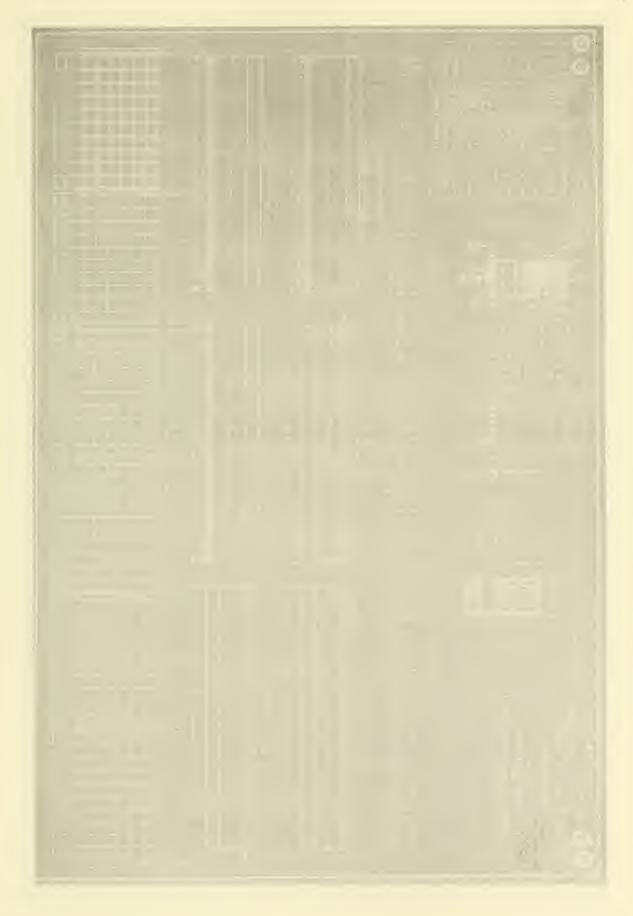
51. Original drawing by King Bridge Company showing truss member shop details - Sheet 2 of 5





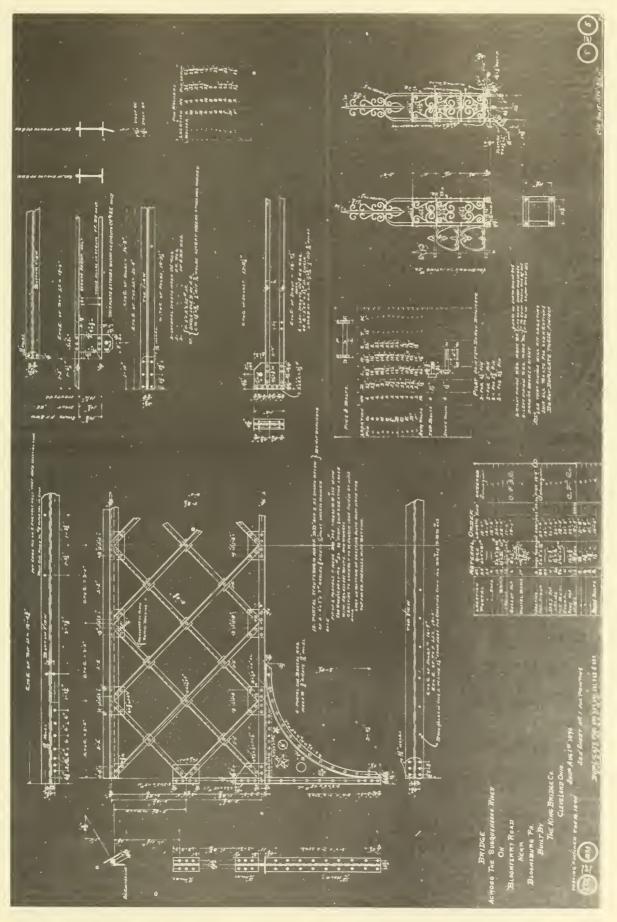
52. Original drawing by King Bridge Company showing truss member shop details - Sheet 3 of 5





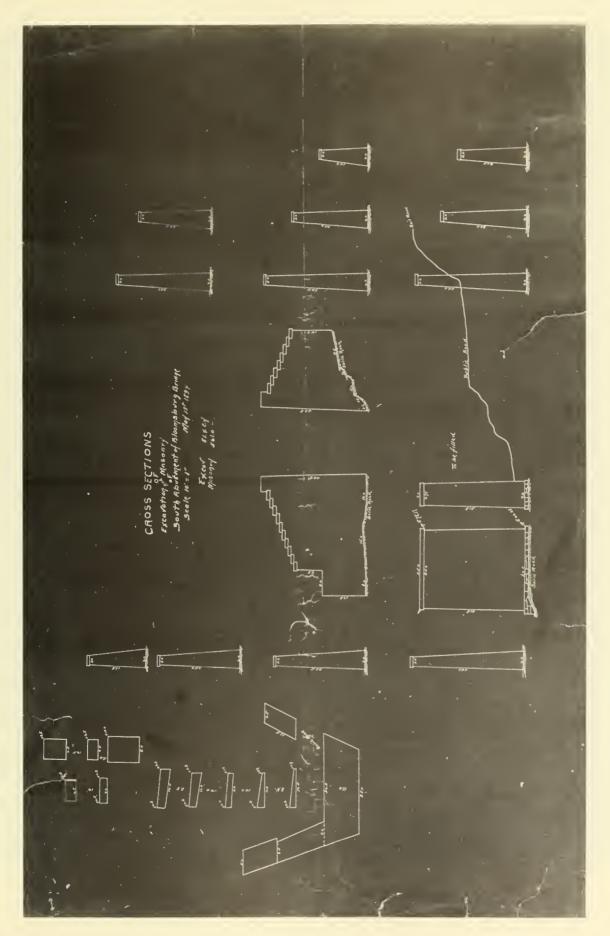
53. Original drawing by King Bridge Company showing joist and shoe details - Sheet 4 of 5





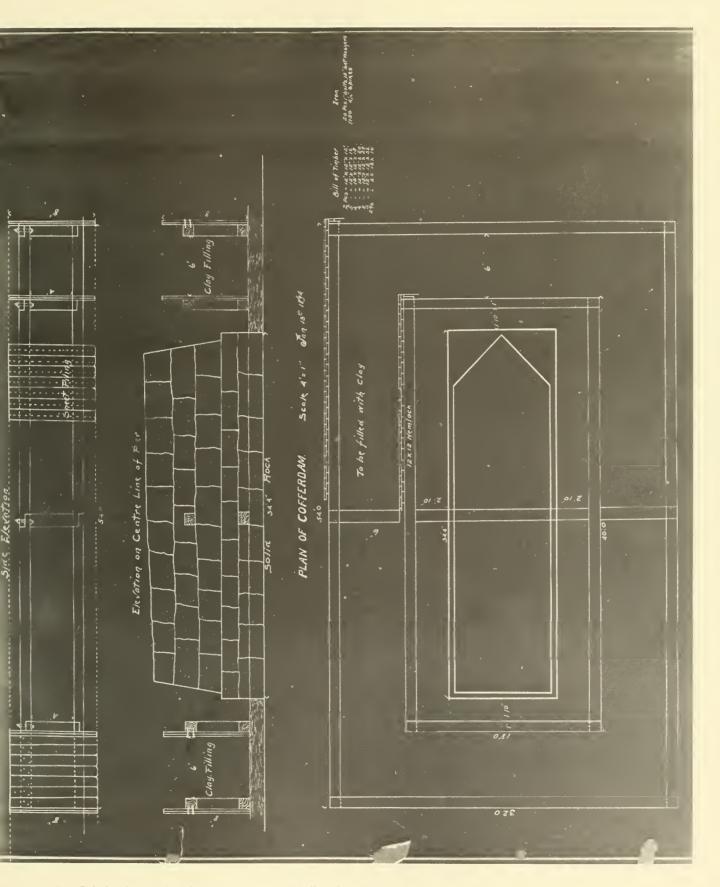
54. Original drawing by King Bridge Company showing end portal shop details - Sheet 5 of 5





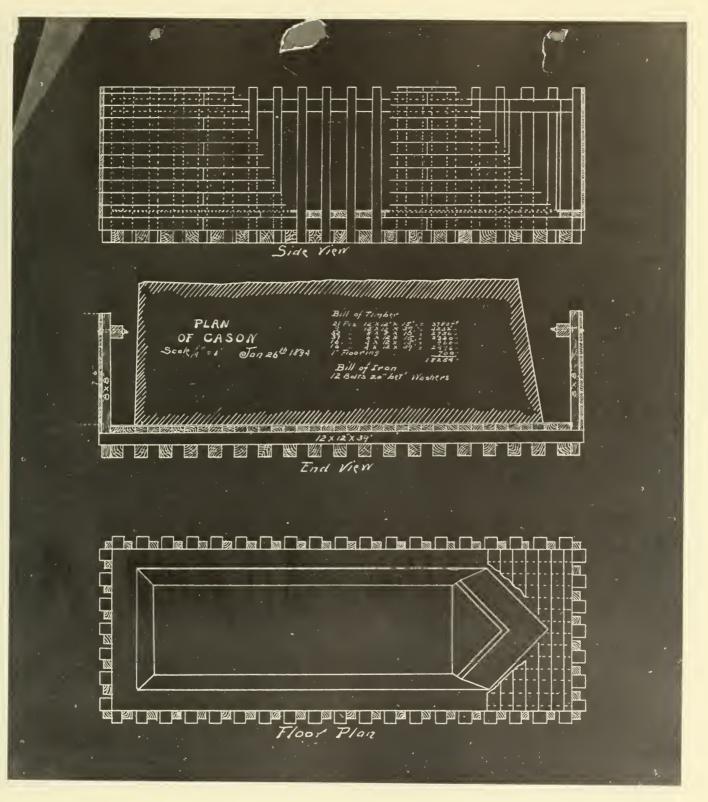
55. Original drawing by unknown - south abutment and wingwall details





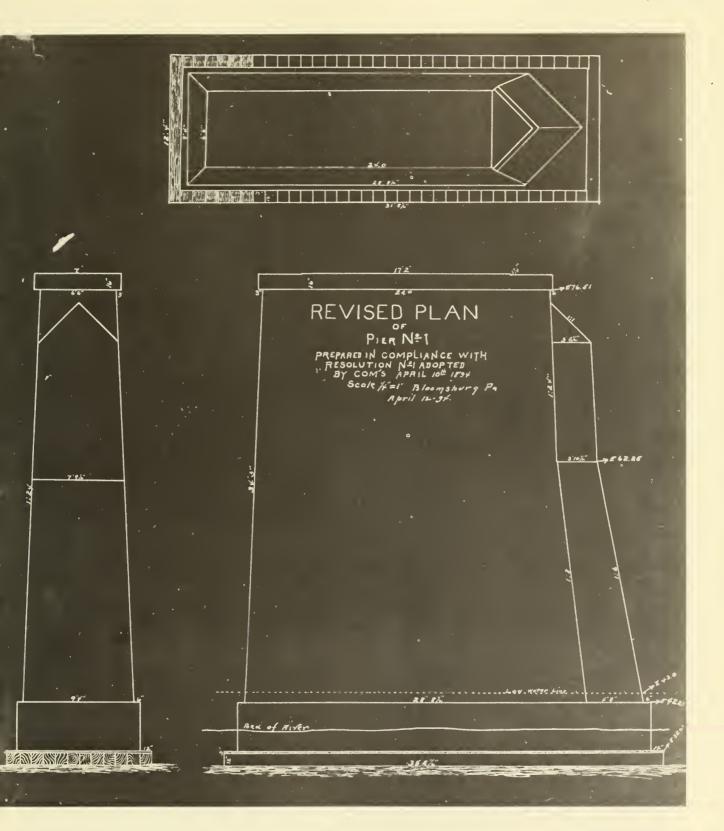
56. Original drawing by unknown - details of cofferdam for Pier 1 to be founded on rock





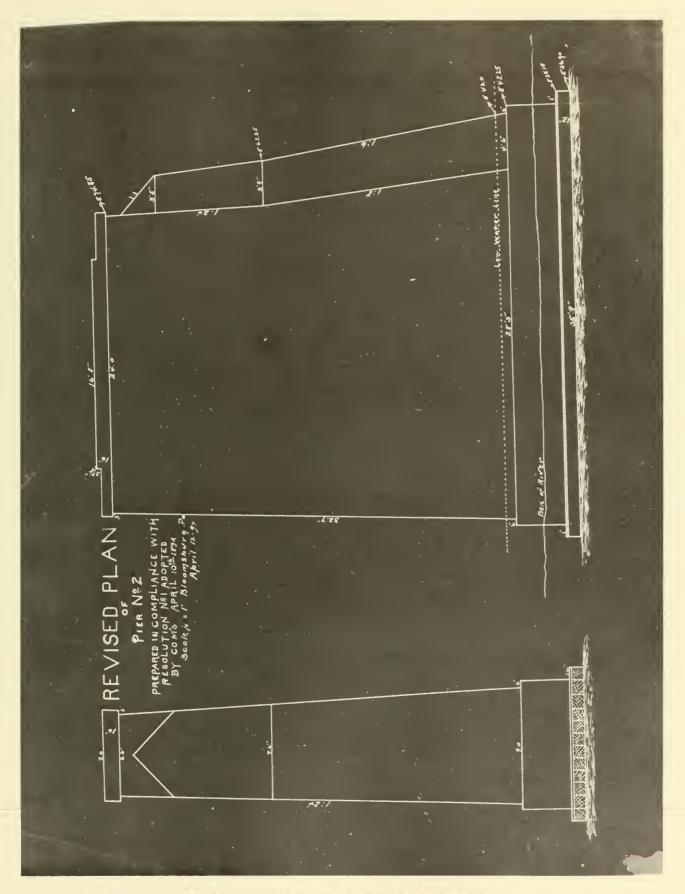
57. Original drawing by unknown - details of caisson for Piers 2, 3, 4 and 5 to be built on soil overburden





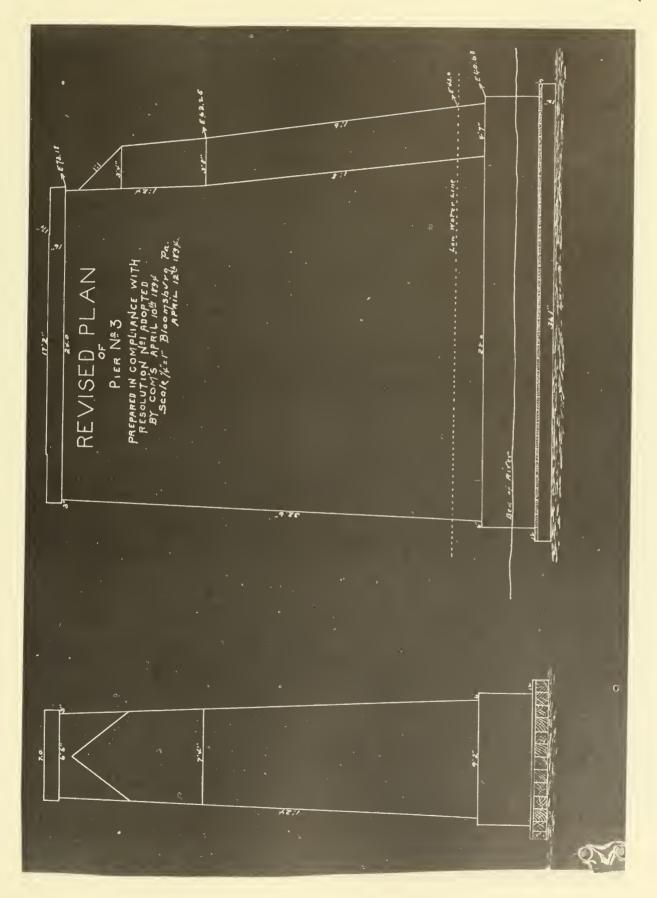
58. Original drawing by unknown - Pier 1 details





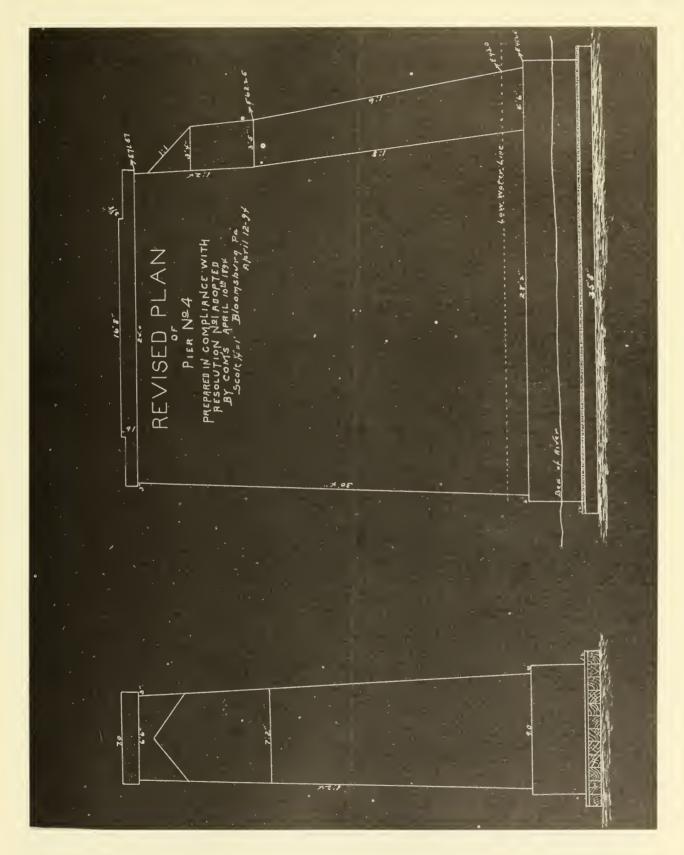
59. Original drawing by unknown - Pier 2 details





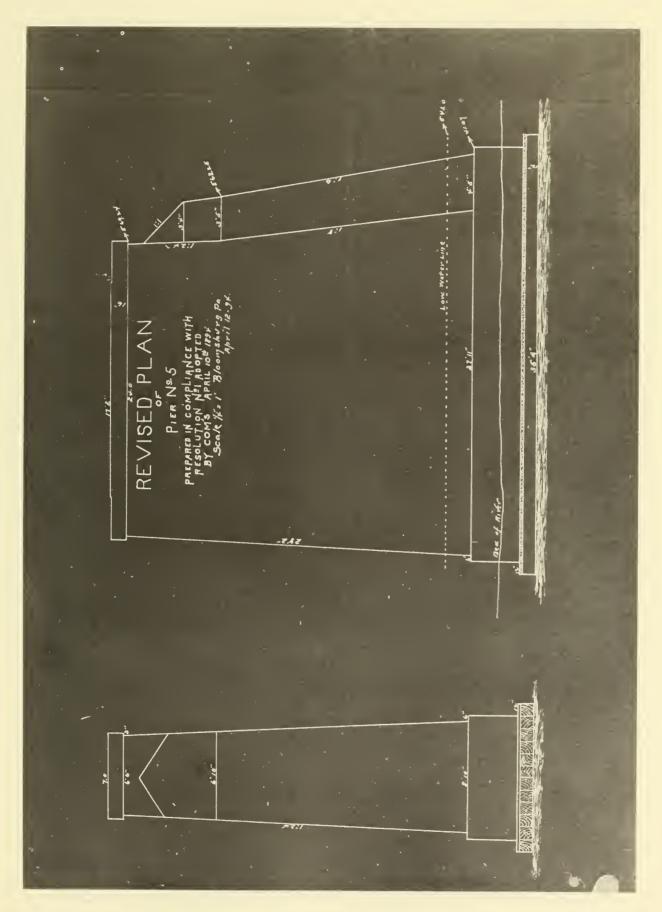
60. Original drawing by unknown - Pier 3 details





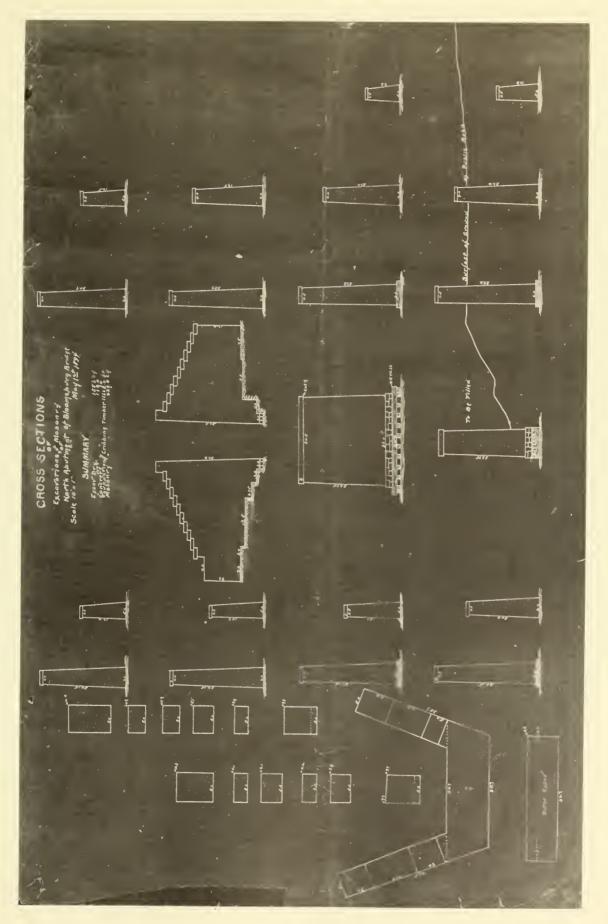
61. Original drawing by unknown - Pier 4 details





62. Original drawing by unknown - Pier 5 details





63. Original drawing by unknown - north abutment and wingwall details









EAST BLOOMSBURG BRIDGE COLUMBIA COUNTY 1894 - 1986



HISTORIC AMERICAN ENGINEERING RECORD